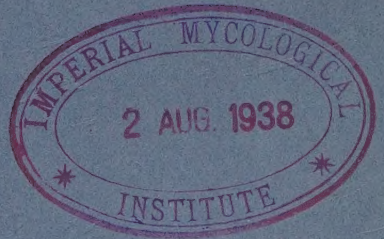


VOLUME XIII
No. 3

GOVERNMENT OF NORTHERN IRELAND
MINISTRY OF AGRICULTURE

MONTHLY REPORT
JULY, 1938



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GOVERNMENT OF NORTHERN IRELAND
MINISTRY OF AGRICULTURE

MONTHLY REPORT

July, 1938

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MINISTRY OF AGRICULTURE

MONTHLY REPORT

JULY, 1938.

The long spell of wet and rather cool weather has shown but little sign of ending, and at the time of writing, the second week of July, the arrival of real summer weather seems as far away as ever. The rains have undoubtedly improved growth, but fine and sunny weather is now badly needed for hay-making. At the same time it must be remembered that, following the rains, the arrival of warm and sunny weather will greatly encourage the spread of potato blight among the growing crops which have not been sprayed. The disease has as yet only appeared on a small scale, and spraying with the Bordeaux Mixture as a preventive measure against the widespread incidence of potato blight is being carried out by most farmers. As a further reminder of the necessity for farmers to take advantage of every opportunity for protecting their crops by spraying, it may now be stressed that, although the arrival of dry and warm weather will mean that haymaking will claim most of their time, they should not neglect to make further applications with the spraying mixture during this, the most dangerous, period for the spread of blight among the potato crop.

Reprinted in this issue is the report on the fruit crop this year. This makes very disappointing reading, and whilst the rains will have helped to swell the growing fruits, the recent heavy storms have doubtless reduced further the quantity of tree fruits, especially apples.

Those engaged in the egg industry, more especially producers and retailers, will find on page 152 a reprint of a wireless talk given recently for their benefit on the subject of the quality of eggs.

AGRICULTURAL CONDITIONS.

AGRICULTURAL CONDITIONS AT 1st JULY, 1938.

Unsettled weather continued throughout the month of June, and with temperatures generally on the low side conditions were, on the whole, rather unseasonal. Heavy rainfalls were frequent, especially towards the close of the month, and they were accompanied by strong winds of gale force on occasions.

There were, however, throughout the month, numerous bright and dry intervals interspersed between the rain storms, but opportunities for seasonal outdoor work were limited. Tillage operations were hampered by the rains, and comparatively little progress with the thinning of the root-crops and the weeding and moulding of the potato crop was possible. As a result weeds are now very much in evidence amongst these crops throughout the country. Haymaking was also an impossible task during these unsettled conditions, but in a few early districts a start has been made with this work.

Although the heavy rainfall had its disadvantages in that it retarded seasonal work in the fields, especially in the heavy soil areas where the ground became very sticky, growth reacted favourably to the moist weather, and pastures and growing crops have improved to an appreciable extent. In light soils the rains were very welcome and, despite the heavy falls of the past two months, the ground is yet in a fairly dry state. The hay crop derived considerable benefit from the rains, as also did flax and oats, but the last-mentioned continues to reflect the effects of the drought conditions of the earlier months. Pastures which were treated with applications of lime and phosphate manures in the autumn and winter months, are looking particularly well, being well supplied with clovers and bottom grasses. There is, however, a considerable amount of rank growth composed of a large proportion of shot grass, and the use of the mower is clearly indicated in many fields.

As indicated, growth has improved with the rains, but more sunshine would have greatly helped all growing crops and pastures.

Supplies of home-grown food for stock feeding are lasting out well and, with few exceptions, existing stocks are stated to be ample for future requirements this season. On some farms, however, where grazing lands suffered severely from the drought and did not provide the usual amount of keep the consequent heavy drain on home-grown foods reduced the stocks to very low levels. Stocks of old potatoes have been considerably reduced since the belated improvement in the demand for this crop.

Following the general improvement in the quantity and quality of pasture the demand for purchased meals and concentrates eased slightly during the month under review. Prices for the principal purchased foods had a similar trend.

Livestock improved somewhat in condition with grass becoming more plentiful, but they are still a little backward for the time of the year on account of the lack of grass earlier in the season, and the general absence of sunshine and seasonally warm weather later. It is understood that in some districts where the grasses "shot" early following the dry weather of the spring months and became very fibrous, digestive troubles have resulted among a number of animals. In general, however, the incidence of disease or ill health among live stock is rare. It is reported that the milk yield has shown an increase on the month.

During the cold and damp spells in the earlier part of June farmers were obliged to house their young calves.

The production of beef cattle received a stimulus with the improvement in grass lands, and supplies for the month of July and onwards will probably be slightly increased with grass-fed animals becoming more plentiful.

The demand for fat cattle eased during June, and prices weakened. Supplies increased during the month, and towards the close were more than ample for requirements. Store cattle were in small to average numbers at fairs, but the lack of grass earlier had an adverse effect on trade, whilst the quieter trade for beef later combined to depress business in the trade for stores.

THE CROPS.

WHEAT.—The condition of the growing crops varies somewhat, but in general it may be stated that the rains of last month brought about a good improvement. Early sown wheat is looking particularly well, and since the bulk of the crop was sown during the autumn and winter months the prospects are bright. In some fields, however, the crop is looking thin and patchy, the result of the drought conditions earlier. Rust is stated to be fairly prevalent in the crops in a number of districts, and some anxiety is felt as to the effects of this disease on the crops.

OATS.—The wet weather favoured this crop which made very good growth during June, especially where growing in heavy soils. In light soil areas, however, the adverse effect of the drought has not disappeared entirely, and there are many fields in which the crops are uneven and patchy.

Leather jacket grubs have caused damage in some crops, while wireworms also have caused some injury.

Supplies of last season's crop marketed during June were, in the aggregate, heavier than in May, but towards the end of the month there was a sharp drop in the quantity marketed. Prices remained fairly steady, and on average were unchanged on the month at 7/6½d. per cwt. The range of prices at all centres was from 7/- to 8/8d. per cwt. Oat straw varied somewhat in quantity during June, and price movements were irregular. On average the quotation for last month was 1/2d. below that of May at 39/10d. per ton.

BARLEY.—This crop is looking very promising at present, having improved appreciably with the rains of the past month. The growth is rather thick in places, and some lodging has occurred following the rains. On light soils the crop was rather backward earlier, but the moister conditions of June have brought about a good recovery.

FLAX.—Flax braided irregularly during the drought, and growth had been slow until the arrival of moister weather. Growth was considerable, however, during June, and in most districts the present condition of the crop is very favourable. Pulling may be a little later than in a normal season in a number of districts.

POTATOES.—The planting of the main crop was completed early in June. This work was done under favourable weather conditions this year, but the cold and dry state of the soil at planting time was not conducive to early development, and in some areas the proportion of "misses" is abnormally high. Some farmers, in order to rectify matters, found it necessary to "dibble in" fresh seed in the fairly extensive gaps created by the "misses". The haulms have made good growth during last month, and generally speaking, the growing crop is looking quite well at present, although perhaps a little backward compared with last year. Blight disease has not yet made its appearance, the low temperatures not being favourable to its development. It is understood that spraying materials are in plentiful supply in all districts, and the spraying of the crop as a preventive measure against the likelihood of a general outbreak has already begun. The digging of early varieties commenced on a small scale, and the results to hand have varied considerably. In most instances, however, the yields have been of fair dimensions and the quality reasonably good.

Stocks of the old crop are nearing depletion in all districts. The tubers kept well as a rule, but sprouting was prevalent especially amongst tubers of the "Arran Victory" variety. The demand for potatoes suitable for shipment exceeded the supply last month, and growers' prices advanced at the close to the following high levels:

		Bagged, per ton			
Up-to-Date (Red Soil)	..	£5	10 0 to	£6	0 0
Arran Banner	..	£5	0 0 to	£5	10 0
Arran Consul	..	£6	0 0		
Arran Victory	..	£4	10 0 to	£5	5 0
Kerr's Pink	..	£5	0 0 to	£5	10 0

The records of weekly shipments are contrasted with those of a year ago in the following table:—

Week ended			Tons	Week ended			Tons
2nd July, 1938	..	..	814	3rd July, 1937	..	..	446
25th June, "	..	..	1,193	26th June, "	..	..	669
18th " "	..	..	1,335	19th " "	..	..	1,120
11th " "	..	..	2,398	12th " "	..	..	2,126
4th " "	..	..	3,068	5th " "	..	..	2,454

At local markets last month where supplies are sold for home consumption there were steadily decreasing supplies of the old crop on offer, and although price movements were irregular throughout, the monthly average figure advanced by 1/0½d. to 4/11d. per cwt. for all classes. The Arran Victory and Kerr's Pink varieties at 5/- per cwt. were 1/2d. and 10d. dearer on the month respectively. Rapidly increasing quantities of the new crop offered at markets more than offset the reduction in supplies of old potatoes, and quotations for all varieties of earlies fell sharply during the month from 28/- to 10/- per cwt. and, on average, the price of 11/9½d. per cwt. for June compares with 11/9d. per cwt. for the corresponding month of 1937.

MANGELS.—The growth of this crop has been slow, but the brairds are now in a fairly promising state, although backward compared with last year. Thinning is now completed in most fields. Weeds have made headway during the rains, and are likely to prove troublesome if damp weather continues. The Mangel fly has attacked some crops but is not so troublesome as usual.

TURNIPS.—The turnip brairds also made good growth in June, and are now well established. Very little damage had been done by the flea beetle, but weeds are troublesome and the sodden state of the ground made the hoeing of turnips an impossible task in all except the light soils. The singling of the crop has been completed in the early districts.

HAY.—Cutting has been delayed by inclement weather, and only a small beginning had been made in the early districts at the end of the month. The crop has made good bottom growth of late and fair to average yields of meadow hay may result. Upland hay, although a much improved crop, is likely to be light in the yield this year.

Supplies of last season's crop on farms were reduced to small dimensions, but there are sufficient stocks left over for emergencies. Reduced supplies

were marketed in June, and average prices hardened on the month by 3/7d. to 66/1d. per ton for upland hay, and by 1/5d. to 50/- per ton for meadow hay.

LIVE STOCK.

CATTLE.—Store Cattle made a good thrive and are in a fairly good healthy condition. There were a few slight outbreaks of “red water” and “hoose”, and digestive troubles followed the eating of the flower and seed heads of grasses.

Supplies of store cattle at fairs varied somewhat, but in general were small to average for the season. The demand throughout June lessened and only prime lots were in request. Prices all over were again down on the month.

It is generally considered that the dearth of stores last season, together with the high costs of feeding stuffs, has brought about a decline in the number of cattle fattened as compared with last year, but although there may be a general reduction in number on the year it should not be very appreciable.

Fat cattle offerings last month generally exceeded requirements and prices eased.

Dairy cattle have made some improvement in condition, and the milk yields are stated to have increased to seasonal high levels. The general health is good. Calving has been normal as a rule, but a fair amount of abortion is common throughout the country.

Supplies of dairy cattle at fairs held in June were of medium size and trade throughout was fairly steady at around late rates.

SHEEP.—All classes are in a healthy condition. Lambs made a fair thrive during the month, but in most flocks progress was rather slower than usual on account of the wet and cool weather.

Plentiful supplies of spring lambs were a slow trade during June, and prices had a downward trend during the month.

Greatly increased supplies of wool were marketed last month, and with trade dull prices declined to lower levels.

PIGS.—Trade for young pigs varied somewhat throughout the country, but as a general rule supplies were ample for the duller demand and sales were slower at easier rates.

Sows for breeding were in small numbers and in fairly good request at prices varying from £7 to £12 per head.

Supplies of dead pigs for the roll and ham trade were clearing steadily and appeared sufficient for requirements.

HORSES.—Trade was slower but the demand remained fair in nearly all districts at the easier rates prevailing last month. Good strong farm horses were fetching from £30 to £45, and ordinary types of farm workers £20 to £30 per head.

MILK.—The weather of June favoured milk production, in that it brought about a welcome improvement in the condition of pastures. Supplies in most districts increased during the month to normal dimensions for the season. Creameries paid from 4½d. to 5d. per gallon for milk delivered, the separated milk being returned to the farmer.

Since the average price paid for milk produced in Northern Ireland and delivered to creameries for manufacturing purposes for the month of May, 1938, exceeded the standard price provided by the Milk and Milk Products Acts (Northern Ireland), 1934 to 1937, no equalisation payments were made in respect of that month.

THE COST OF LIVING INDEX FIGURE.

The cost of maintaining unchanged the pre-War standard of living of working-class families at June 1st, was approximately 55 per cent. above the level of July, 1914, the corresponding figures for April 30th, 1938, and June 1st, 1937, being 56 and 52 respectively.

At June 1st the index of retail prices of food in Great Britain and Northern Ireland, as ascertained by the Ministry of Labour, was 38 per cent. above the level of July, 1914, as against 39 per cent. at April 30th, and 36 per cent. at June 1st, 1937. The downward movement in the index during the month under review was chiefly the result of reductions in the prices of milk, bread and flour, although this was partly offset by the higher prices recorded for potatoes, butter and eggs.

THE MARKETS DURING JUNE.

In the vegetable markets last month there was a scarcity of home-grown vegetables, pamphrey and parsley being the only vegetables in larger supply than in May, and while leeks were slightly less plentiful, carrots were marketed in very small quantities. Broccoli, garden turnips and parsnips disappeared from the markets. Price movements generally were irregular:—Pamphrey cheapened by ½d. to 10½d. per dozen, parsley by 1¾d. to 6d. per bunch, while leeks at 6d. per bunch were 1d. dearer, and carrots were firm on the month at 10/- per cwt. Farmers' butter, which recorded a considerable increase in supply, was a shade cheaper on the month. Print butter was ¾d. cheaper at 1/3d. per lb., and lump butter ½d. at 1/2½d. per lb. Hen eggs were in larger supply than in May, and duck eggs also recorded a fair increase

on the month. Prices as fixed by the Ministry from week to week tended upward in the case of hen eggs, but duck egg prices had a slightly easier tendency on the month as shown in the table below. Poultry were more numerous than a month ago, and while chickens at $2/7\frac{1}{2}$ d. each were $2\frac{1}{2}$ d. cheaper, and hens at $1/9\frac{1}{4}$ d. each $1\frac{1}{4}$ d. cheaper, ducks were firm at $2/5$ d. each. The prices per lb. live weight paid by wholesale merchants eased on the month in the case of chickens, and ranged from $6\frac{1}{2}$ d. to 10d. per lb., while hens firmed slightly and ranged from 4d. to $7\frac{1}{4}$ d. per lb., and ducks at from $6\frac{3}{4}$ d. to 9d. per lb., and ducklings at 6d. to 9d. per lb. were dearer than a month ago.

There were large increases in the supplies of unwashed wool marketed in June, and prices for both classes of wool cheapened by $1\frac{1}{2}$ d. per lb. on the month, and averaged 5d. per lb. for long and 4d. per lb. for mountain wool.

MARKETING OF EGGS ACTS (N.I.) 1924—1937.

WHOLESALE DEALERS' PRICES.

The following table shows the prices fixed by the Ministry, and payable by licensed wholesale dealers, for eggs purchased from producers during the following weeks, as compared with the average prices at markets for the corresponding weeks of 1937.

Week ended	1938				1937			
	Hen eggs per lb.*		Duck eggs per dozen*		Hen eggs per lb.		Duck eggs per dozen	
	s.	d.	s.	d.	s.	d.	s.	d.
June 4th	0	7	0	10	0	6	0	9
„ 11th	0	7	0	10	0	$6\frac{1}{2}$	0	$9\frac{1}{4}$
„ 18th	0	8	0	9	0	$6\frac{3}{4}$	0	$9\frac{1}{4}$
„ 25th	0	$8\frac{1}{4}$	0	$9\frac{1}{2}$	0	7	0	$9\frac{1}{2}$
July 2nd	0	9	0	$9\frac{1}{2}$	0	8	0	10

*Where hen eggs are delivered by the producer to the packing store of a licensed Wholesale Dealer of Class A an additional $\frac{1}{2}$ d. per lb. is payable; in the case of duck eggs an additional $\frac{3}{4}$ d. is payable for each complete dozen so delivered.

Payment on a quality basis came into operation during the week ended 5th March, 1938.

The following were the standard deductions:—

Hen Eggs : "Seconds" and soiled eggs $\frac{1}{2}$ d. per egg, Rejects $\frac{3}{4}$ d. per egg during the first two weeks in June, afterwards 1d. per egg.

Duck Eggs : Rejects 1d. per egg for same period, afterwards $\frac{3}{4}$ d. per egg.

THE FRUIT CROP PROSPECTS, 1938.

The weather conditions of the past winter were comparatively mild, and provided plenty of opportunities for carrying out seasonal work in orchards with the result that more progress was made with renovations and cultivations than a year ago. This was particularly the case as regards spraying, and the winter programme was adhered to more conscientiously than formerly. The majority of the principal growers in all districts sprayed their fruit trees with tar-oil distillate washes during the dormant season. Incidentally the Ministry's scheme of loans to assist growers in the purchase of spraying apparatus and materials appears to have helped towards this end in a number of districts. The weather in February and March was unusually fine and dry for the time of the year, and favourable for all kinds of outdoor work. At the close of the latter month growth was more advanced than in a normal season, and with the trees in most orchards in full bloom the prospects for this year's crop were very promising. Unfortunately there was a return to winter temperatures at the beginning of April, and the very sharp frosts experienced in that month, particularly round the middle of the month, together with the prevailing cold easterly and north-easterly winds, wrought considerable damage to the flowers in many orchards. Only those orchards situated on high ground where the air drainage is good, and along the sea coast, escaped heavy damage from the numerous sharp frosts. The continuance of low temperatures and the drought up to the first week of May retarded growth and further damage was caused to the remaining blossoms by late frosts. Although some improvement followed the arrival of the rains early in May, the prospects for this year's crop of all fruits are decidedly poor. As stated, in those orchards on high ground or situated near the sea coast where the fruits escaped the frosts to an appreciable extent, there may be fair yields, but elsewhere many of the crops have been completely destroyed. It is understood that the quality of a fair proportion of the fruits will have suffered to some degree from the effects of the frosts at the time of blossoming, and that apples especially have been disfigured very appreciably. The rains of June have been beneficial to most fruits, but with temperatures remaining on the low side growth has been slow, and at the time of writing most fruits are only in fair condition.

TREE FRUITS.

Apple trees blossomed unusually early this year, at the end of a remarkably long spell of fine and mild weather in February and March, and the blossom suffered heavy damage from the numerous sharp frosts in April; only those trees growing in high open ground escaped to any appreciable extent. In the low-lying orchards the damage to the set of fruit was most extensive, and in quite a number of orchards the blossoms on the trees were completely destroyed. Bramley's Seedling, the variety grown most extensively in Northern Ireland, being very susceptible to attacks of frosts, suffered badly, and with relatively few exceptions the yields of this variety will be light. The Grenadier variety did not fare quite so badly, but the accounts to hand indicate that yields will be much smaller than for the previous season. Other cooking varieties are in a slightly more promising state, and the dessert varieties are somewhat similarly placed, but in general the apple crop will be almost a complete failure this year in most of the principal fruit-growing districts. This conclusion has been reached after an exhaustive enquiry into the position in all districts, taking into account the fact that much of the fruit has been disfigured to some extent by the action of the frosts at the time of setting. Of the other tree fruits very poor accounts are to hand concerning damsons and plums, wholesale damage and destruction having been caused to the flowers by the unduly heavy attacks of frost in April and May. Pears and cherry trees too are carrying very little fruit, and the yields will be much lighter than in a normal season.

BUSH AND SOFT FRUITS.

These fruits met a similar fate to the tree fruits, the early blossoms being severely damaged by frosts in the low-lying plantations and elsewhere, where the air drainage was not good. The prospects, however, are more encouraging than in the case of the other fruits. Strawberries, especially, have improved with the rains since the second blossoms appeared, and the yields may yet reach fair dimensions in many plantations. Gooseberries, which were very badly hit by the frosts in the low-lying orchards, will give a light crop, as also will blackcurrants and raspberries.

The following table shows in detail the position of the principal fruits grown in Northern Ireland compared with a year ago.

County	APPLES				OTHER TREE FRUITS				BUSH FRUITS			
	Cooking Varieties		Dessert Varieties	Damsons	Plums	Pears	Cherries	Straw-berries	Rasp-berries	Black-currants	Goose-berries	
	Bramley's Seedlings	Other Varieties										
Antrim ..	P. (V.G.)	P. (F. to G.)	P. (G.)	P. (G.)	V.P. (G.)	P. (A.)	P. (G.)	P. to F. (G.)	F. (G. to V.G.)	P. to F. (G. to V.G.)	P. to F. (G. to V.G.)	
Armagh ..	V.P. (G.)	P. to F. (F. to G.)	P. to F. (G.)	V.P. (F. to A.)	V.P. (G.)	P. (P.)	P. (G.)	F. (F.)	P. to F. (G. to V.G.)	P. to F. (G. to V.G.)	P. to F. (G. to V.G.)	
Down ..	P. (V.G.)	P. (G.)	P. (G.)	P. (A.)	P. (G.)	F. (A.)	P. to F. (G.)	P. to F. (A.)	P. (G. to V.G.)	P. to V.P. (G. to V.G.)	P. to A. (G.)	
Fermanagh	V.P. (G.)	P. to F. (F. to G.)	P. (G.)	V.P. (F. to G.)	V.P. (A.)	F. (P.)	P. to F. (G.)	F. (G.)	P. (G.)	P. to F. (G. to V.G.)	P. to F. (G. to V.G.)	
Londonderry	F. (G.)	A. (F. to G.)	F. (G.)	V.P. (F.)	V.P. (F.)	P. to F. (P.)	F. (F.)	A. (G.)	A. to G. (G.)	F. (G.)	F. (G.)	
Tyrone ..	P. (V.G.)	P. to F. (G.)	F. (G.)	V.P. (P. to F.)	V.P. (F.)	P. (F.)	P. to F. (G.)	A. (G.)	F. (G.)	P. to F. (G. to V.G.)	P. (G. to V.G.)	
Northern Ireland	V.P. (V.G.)	P. (A. to G.)	P. to F. (G.)	V.P. (F. to A.)	V.P. (F. to G.)	P. to F. (F.)	P. to F. (G.)	F. (G.)	F. (G. to V.G.)	F. (G. to V.G.)	F. (G. to V.G.)	

Abbreviations :—V.G.—Very Good. G.—Good. A.—Average. F.—Fair. P.—Poor. V.P.—Very Poor.
 The letters in brackets relate to the position of last year's crop at the corresponding date.

INSECT AND FUNGOID PESTS.

Growers had ample opportunities for spraying during the months of February and March, and it appears that this operation was carried out to a much greater extent than in former years, estimates placing the number of principal growers in all districts who carried out this important work at upwards of 90 per cent. This helped considerably in keeping down attacks of insect and fungoid pests, but with the weather being abnormally fine and favourable for the increase of insect pests, there has, notwithstanding these precautionary measures, been a considerable amount of infestation in most orchards. This is attributed to some extent to the fact that spraying was not done with that degree of thoroughness which is essential for the satisfactory control of the insects. Aphides in particular have been very troublesome this year, and only by the systematic applications of suitable insecticides have these been kept under control. Cluster cup in gooseberries has also been prevalent in many plantations.

It is reported that many apple growers who carried out the pre-blossom spraying of their trees with Bordeaux mixture have, in view of the prospects of poor yields, neglected to make post-blossom applications of the mixture. This policy is a short-sighted one, and the trees are bound to suffer in consequence. It should also be remembered that such neglect will render the control of apple scab much more difficult next year. Summer sprayings are essential for the control of this disease, and those growers who neglect to spray their trees thoroughly and sufficiently often during summer will undoubtedly find that the quantity and quality of the fruit will be lowered by the ravages of the disease.

In addition to the advice and assistance available to fruit growers through the services of the Horticultural Instructors employed by the County Committees of Agriculture, the Ministry has published several leaflets giving advice on various matters connected with the production and marketing of fruit. Copies of these can be obtained free on request.

The Ministry also takes this opportunity of expressing its thanks to the fruit growers who, by furnishing particulars of their crops, assisted in the compilation of this report, and also to the Horticultural Instructors for their co-operation.

ENGLAND.

The following report on the condition of the apple crop in England on the 30th June has been issued by the Ministry of Agriculture and Fisheries. The figures for 1st July, 1937, are shown in brackets. The scale on which the index figures are based is as follows:—0-20 very bad; 21-40 bad; 41-60 fair; 61-80 good; 81-100 very good.

FROST DAMAGE.—Reports from agricultural meteorological stations situate in the fruit and vegetable-growing areas of England indicate that conditions of severe frost were widespread on the night of the 7th-8th May. Some areas experienced frost of almost equal intensity during the following night. Much blossom which had escaped the April frosts was damaged on these occasions.

APPLES.

EARLY COOKING VARIETIES.—Tamar Valley (35-40) 60-65; North Gloucestershire (60) 50; Worcestershire, Evesham and Pershore Area (60) 45; Devon (42) 41; Middlesex and South Buckinghamshire (55) 40; East Norfolk (Emneth Early) 45, Lord Derby (55) 40; Kent, Lord Derby (80) 30, Others (60) 25; Cambridgeshire (45) 25; Essex (30) 25; East Sussex (60) 25; Hereford (25) 20; West Sussex (55) 20; West Gloucestershire (20) 15; Lincolnshire (Holland) (15) 15; Wisbech and West Norfolk (Lord Derby and Grosvenor) 70, Others (15-20) 15.

“BRAMLEY’S SEEDLING.”—Tamar Valley (35-40) 60-65; Middlesex and South Buckinghamshire (47) 40; East Norfolk (40-50) 35; East Suffolk, 30-35; Essex (50) 25; North Gloucestershire (21) 25; Devon (41-45) 20-25; Worcestershire (Evesham and Pershore Area) (30) 18; Kent (45) 15; East Sussex (45) 15; Lincolnshire (Holland) (10) 10; Somerset (40) 10; West Sussex (50) 10; Cambridgeshire (15) 5; West Gloucestershire (15) 5; Hereford (20) 5; Wisbech and West Norfolk (10-15) 5.

HINTS TO PRODUCERS AND RETAILERS WITH REGARD TO QUALITY OF EGGS.

A Wireless Talk given by Mr. R. F. Thompson, from the Northern Ireland Station on 6th June. Permission to include the talk in this issue has been kindly granted by the British Broadcasting Corporation to whom the Ministry acknowledges thanks.

The question of purchase on a quality basis, and the best methods to adopt in order to avoid second quality eggs, are matters which at the present time are creating a considerable degree of interest on the part of retail distributors, as well as of producers, and it would appear that there are certain features of the new legislation on which there is a good deal of misunderstanding on the part of both producers and retailers.

The object of this talk, therefore, is to clear up these misunderstandings, and at the same time to offer some hints which may be of help to all engaged in the industry. For this purpose it is perhaps better to begin with the producers.

In the first place it is understood that certain people are under the impression that the size of an egg has some relation to quality, and it would appear that some producers are keeping their small eggs for home use, as they believe these are seconds. Now I want to make it perfectly clear that the smallest eggs produced may be quite fresh and grade as first quality, and no deductions are made for small eggs unless the quality of the contents is affected.

The second point to which I wish to refer is the identification ticket. As the eggs must be tested before being paid for, there are one or two points of utmost importance with which the producer should be familiar. On handing over eggs to a dealer the producer should make quite certain he receives a ticket showing his name and address, date of delivery of the eggs, and the quantity delivered, both in weight and number. A copy of this ticket is placed with the eggs when packed, and goes forward with them to the packer's store. When the eggs are being paid for this copy of the ticket, which was placed with the eggs, should be returned to the producer and should bear the same number as the ticket which was originally handed over when the eggs were delivered; when returned this copy should show the price and deductions, if any. If tickets show signs of alteration, or if the date of testing is omitted, the matter should be taken up with the dealer, or be referred to the Ministry of Agriculture for investigation. Both copies of the ticket should be retained in case of dispute. All eggs must be tested within three days from the date of delivery by the producer, and should be paid for within seven days from date of delivery.

Some producers seem to think they are entirely in the merchant's hands, and that he can deduct seconds or rejects just as he pleases. I can assure these producers that such is not the case. The standard of testing in all packers' stores is supervised by the Ministry's Inspectors, and the standard is kept as uniform as is humanly possible. It is practically impossible for one packer to give a producer better results than another, as all packers' supplies of seconds and fresh eggs are frequently examined, and if producers' lots contain abnormal quantities of seconds or rejects the Inspectors see the eggs. Another point in this connection is that all eggs removed as seconds must be stamped and sold as seconds, and such records kept as ensure that the packer cannot remove or make more deductions than he actually should. Very often complaints are made, and producers state that they have changed from one packer to another and got better results, but the improvement is simply due to more care in handling by the producer himself if he were only being honest about it. And evidence that a producer has less seconds one week with one packer than he has the following week with another, or even a difference in two lots in the same week is no evidence that the two lots are not being tested to the same standard. It only goes to show that the producer has the matter of improvement in his own hands when the quality of one lot is better than the other. Sometimes there may be one or two seconds or rejects in a producer's lot which are due to natural causes such as blood spots and over which he had no control. In such cases of course nothing can be done. I might here point out that taking the trade as a whole the proportion of seconds and rejects found in producers' supplies up to the present has not, speaking generally, been very high, but we are now entering the most difficult part of the season due to the hot weather, and I would, therefore, like to deal with some of the most important points requiring attention if seconds are to be avoided. They are as follows:—Regular collection from the nests, suitable storage, proper methods of cleaning, removal of male birds from the flocks immediately after the hatching season, and regular marketing. •

Every producer, who is having deductions made, has his own particular problem to solve; sometimes it is very difficult, and requires close observation to detect the cause of the trouble. Producers when complaining often state definitely that their eggs are being collected three times a day from the nests, yet it is quite obvious on examination of their supplies that the seconds are due to fertile eggs having been subjected to heat. It is so easy to forget that on one particular day during the period of collection, everyone was busy and collection of eggs from the nests was neglected; or again some member of the family may have found an out nest unknown to the others, and added it to the collection. In some cases poultry houses have nest boxes extending outside and exposed to the sun. These nest boxes may become very hot, and unless the eggs are collected frequently the quality is affected. Instances of

collecting eggs from the nests and placing them in buckets hanging to the roof of poultry houses have been experienced. As the roof may become very hot the results are even worse than if the eggs were allowed to remain in the nests.

Regarding storage, a cool, dry, properly ventilated store is essential. Some stores which are otherwise good have windows in a sunny position, and if eggs are allowed to remain exposed they rapidly become seconds. Another very important point is to bring the eggs to a cool room or store immediately after collection from the nests; keeping them in kitchens for a time is a common fault. Open baskets should be used for collection purposes so that the eggs may be allowed to cool as rapidly as possible and less hair cracks are caused than with buckets. It is most important that the eggs should be allowed to cool properly before packing them into cases. Stores adjoining wash-houses or boiler-houses are unsuitable for eggs unless properly insulated. If the hot steam is allowed to penetrate to the egg store the results can be very harmful. But perhaps the worst faults of all are the keeping of male birds with the laying flock during the summer season and allowing broody hens to sit on the nests.

When cleaning eggs never wash or steep them, use a damp cloth taken from cold water and dry the eggs immediately.

These hints are given for the benefit of those producers who are experiencing trouble with seconds. Others may consider from this talk that to ensure having all eggs first quality when marketed is a complicated job, but such is not the case. Very often it is due to the fact that some of the points which I have enumerated have been neglected or may not have been considered as of importance. The fact that many producers have not yet had a second quality egg in their supplies should make it quite clear that only a little extra care and the cultivation of a regular system of dealing with eggs on the farm is all that is required to get similar results. I would further like to remind those producers who are experiencing trouble that previous to the introduction of purchase on a quality basis their supplies most likely contained seconds and rejects to a far greater extent than at present, and the producers generally were paying for the loss. This scheme of purchase on a quality basis is simply driving home the fact that producers' supplies very often contain second quality eggs; they consider they are being ruined by a system which is only making known the loss which the industry was previously experiencing. The only difference, of course, is that the careful producer is not now helping to pay for the mistakes of his careless neighbour.

I am very pleased to say that considering the weather conditions this year quality has shown a decided improvement, and the soiled egg has practically disappeared.

And now a word to the retailer. Some confusion seems to exist regarding labelling of supplies which are offered for sale, and in the first place it should be made clear that all eggs must be sold under a description of quality. Where eggs are being sold as new-laid they must be labelled "new-laid eggs", and if seconds are unstamped they must be labelled "second eggs" and sold as such. If eggs are labelled or sold as "new-laid" and contain seconds the retailer is liable to prosecution. The question which naturally arises is how is the retailer to know when eggs have become seconds. The answer is, he has no means of knowing unless he tests, but he can take certain precautions which will ensure that very little, if any, risk is being taken. First of all he can get his supplies from a reliable producer on whom he can depend not to let him down; better still he can test supplies purchased from producers so as to make certain they are all fresh or new-laid; or he may purchase tested eggs from a packer with whom, subject to certain conditions, he has a three days' guarantee. On the other hand I would like retailers to know that where eggs are exposed for sale in shop-windows or outside shop premises they are taking entire responsibility for the quality no matter from what source or when the eggs were purchased, and are running a grave risk of prosecution for quality. Some retailers say that sales go down when the eggs are not exposed where the customer can see them from the outside. This would not apply if all retailers kept them inside and away from the sun, dust and dirt. It should be remembered that retailers would never think of exposing butter or other perishable commodities, and yet consumption does not suffer. There are just one or two further points which are sometimes neglected by the retailer, and on which I would venture to offer advice. Eggs are very porous and readily absorb unpleasant odours. Do not, therefore, keep eggs near to paraffin oil, fish, onions or anything likely to cause contamination. Where this happens customers are sure to complain regarding quality, and the retailer blames his supplier when he himself is at fault.

Another very important point is to make certain that the lot exposed for sale, or the last lot purchased is disposed of before renewing the supply, otherwise some of the eggs may remain unsold for a long period. If possible, retailers should arrange to get supplies twice weekly, and if any eggs remain over from the previous delivery they should either be tested or labelled and sold as seconds. In conclusion, I would say to both producers and retailers, if you have any difficulty in regard to quality communicate with the Ministry of Agriculture, Stormont, when arrangements will be made for the visit of an Inspector who may be able to assist you in solving your problems.

MARKETING SCHEMES.

AGRICULTURAL MARKETING (PIG INDUSTRY) ACT (N.I.) 1934.

PIG PRICES FOR JULY, 1938.

The following announcement has been made by the Pig Industry Council.

PRICES FOR DEAD PIGS.

The prices per dead cwt. for dead pigs sold by producers to curers in Northern Ireland in July, 1938, are as follows:—

Weight Class. (Dead Weight)	Grade 1.	Grade 2.	Grade 3.	U.L. or U.F.	Partly Black Pigs.
c.1.0.21 to c.1.1.13	67/6	64/6	61/6	57/6	5/- below relevant Grade Price.
c.1.1.14 to c.1.2.3	71/6	68/6	65/6	61/6	
Weight Class. (Dead Weight)	Grade A.	Grade B.	Grade C.	U.L. or U.F.	
c.1.2.4 to c.1.2.14	71/6	68/6	65/6	62/6	
c.1.2.15 to c.1.3.14	71/6	68/6	65/6	62/6	
c.1.3.15 to c.2.0.0	68/6	65/6	62/6	59/6	
c.2.0.1 to c.2.0.14	62/6	59/6	56/6	53/6	

Pig Carcases c.1.0.0 to c.1.0.20:—64/6

(N.B. These prices represent a decrease of 7d. per cwt. on the June prices).

Authorised cuts:—

- (a) Broken ham (dry, shank and/or shell bone break)—5% of the gross value of the carcase.
- (b) Broken ham (wet break)—12½% of the gross value of the carcase.
- (c) Shoulder-stuck carcase—3/- per shoulder affected.

The gross value of a carcase is the product of the dead weight and the relevant grade or other price per cwt.

Where portion of a pig carcase is condemned on account of disease the existence of which could not reasonably have been known to the producer before despatch to the curer, the appropriate grade price (or fixed price if the carcase weighs not less than 1 cwt. 0 qr. 0 lb. and not more than 1 cwt. 0 qr. 20 lb.) shall apply. If the carcase is wholly condemned on account of disease the existence of which could not reasonably have been known to the producer before despatch to the curer the relevant Grade 2 or Grade B price (or fixed price if the carcase weighs not less than 1 cwt. 0 qr. 0 lb. and not more than 1 cwt. 0 qr. 20 lb.) shall apply.

The foregoing prices do not apply in the case of (a) wholly black pigs, boars, rigs or stags, sucked sows, and pig carcasses weighing under c.1.0.0 or over c.2.0.14, and (b) pigs visibly diagnosable as diseased before despatch by the producer and subsequently condemned; emaciated or screw pigs, smelling pig carcasses with definite indications of putrefaction, and pig carcasses badly abused or damaged before being handed over by the producer to the curer.

PRICES FOR WILTSHIRE PIGS SOLD ON DIRECT CONTRACT.

In the case of pigs sold alive under direct contract to Wiltshire curers the prices per dead cwt. payable for pigs delivered in respect of the month of July, 1938, are as follows:—

Weight Class. (Dead Weight)	Grade 1.	Grade 2.	Grade 3.	U.L. or U.F.	Unsuitable.
c.1.0.21 to c.1.1.13	77/6	74/6	71/6	67/6	64/6
c.1.1.14 to c.1.2.3	77/6	74/6	71/6	67/6	64/6
	Grade A.	Grade B.	Grade C.		U.L. or U.F.
c.1.2.4 to c.1.2.7	74/6	71/6	68/6		65/6
c.1.0.0 to c.1.0.20	Suitable	66/6	Unsuitable 64/6		
Over c.1.2.7	On the same basis as pigs sold dead				

(N.B. These prices represent a decrease of 7d. per cwt. on the June prices).

PRICES FOR LIVE PIGS SOLD TO THE PIGS MARKETING BOARD (NORTHERN IRELAND).

In the case of pigs sold alive to the Pigs Marketing Board during July, 1938, the prices per live cwt., according to grade, are as follows:—

Live Weight.	Grade 1.	Grade 2.	Grade 3.	Unsuitable.
c.1.1.14 to c.1.2.13	50/-	50/-	50/-	48/6
c.1.2.14 to c.2.0.0	58/3	56/-	53/9	U.L. or U.F. 50/9 48/6
c.2.0.1 to c.2.1.14	53/9	51/6	49/3	47/-
c.2.1.15 to c.2.2.7	51/6	49/3	47/-	44/9
c.2.2.8 to c.2.2.21	47/-	44/9	42/6	40/3

These prices do not apply to live pigs under c.1.1.14 or over c.2.2.21, live pigs intended for breeding, live boars, live sucked sows, rigs or stags, injured or diseased pigs, live in-pig gilts, or live pigs sold (on contract registered with the Pig Industry Council) to curers in Northern Ireland. All other live pigs inside the weights c.1.2.0 to c.2.2.21 can be sold only to the Board.

AUTHORISED DEDUCTIONS.

Every pig (dead or alive) sold to a curer or to the Pigs Marketing Board is subject to a levy and contribution at present amounting to 3/-.

In addition to this amount, a deduction of 4d. per pig may be made in the case of sales to curers to cover insurance, so that the producer will not suffer financial loss if the carcase is condemned as unfit for human consumption.

GRADING STATISTICS.

Table showing the percentages of pig carcasses falling within the weight and grade classes indicated during April, 1938.

Under c.1.0.21		c.1.0.21 to c.1.1.13					c.1.1.14 to c.1.2.3					Totals
Suitable	Un-suitable	Grade 1	Grade 2	Grade 3	U.L. & U.F.	U.	Grade 1	Grade 2	Grade 3	U.L. & U.F.	U.	
1.24	.24	2.56	1.58	.55	.30	.01	4.66	6.04	2.81	1.48	.03	
Grade A.				Grade B.				Grade C.				74.77
1	2	3	4	1	2	3	4	1	2	3	4	
8.60	20.18	2.88	.50	6.64	19.36	3.76	.94	2.33	8.13	1.15	.30	
Ungraded Carcasses.												3.73
Under Grade A measurements. U.L.	Over Grade C measurements U.F.	Wholly condemned U1.	Wholly black, injured or damaged U2.	Overweights, boars, sows, etc. X.	Partly Black Y.							
.03	2.70	.03	.40	.56	.01							
Total						100%						

The volume of trade in pig carcasses during April declined by almost 9 per cents which the curers furnish to the Ministry.

The volume of trade in pig carcasses during April declined by almost 9 per cent. from March. Moving with the alteration in the fixed price, the average value per cwt. advanced by 7d. to 67/5d., and the average value per carcase by 1/4d. to £5 12s. 2d. The average weight recovered the 2 lbs. fall of March to c.1.2.19 lb.

The following table gives the percentage results of an analysis of the purchase and grading statements furnished by Wiltshire Bacon Curers in respect of live pigs delivered on direct contract by producers during the month of May, 1938.

Weight Class.	Grade 1.	Grade 2.	Grade 3.	Unsuitable U.L. or U.F.	Total
Under c.1.0.0					.8
c.1.0.0 to c.1.0.20					5.6
c.1.0.21 to c.1.2.3	55.8	28.7	4.8	1.9	91.2
	Grade A.	Grade B.	Grade C.		
c.1.2.4 to c.1.2.7	1.3	.8	.3	—	2.4
c.1.2.8 to c.1.3.14					
				Total	100.0

The average net price per cwt. in respect of these deliveries works out at £3 14s. 5d. after making allowance for insurance and contribution to the Pigs Marketing Board.

The average weight works out at c.1.1.12, the net average price per pig being £5 0s. 9d.

COST OF STANDARD PIG RATION.

The average retail cash price per cwt. of the standard ration for the sixteen weeks' period ended 18th June, was 9/11 $\frac{3}{4}$ d. The average price for the similar period ended 21st May, was 10/1 $\frac{3}{4}$ d. per cwt. These figures have been calculated by the Ministry from returns collected from 10 representative centres in Northern Ireland.

The following is the ration upon which the feeding cost is based :—

Maize Meal	...	...	...	30%
Barley Meal	...	...	...	30%
White Pollards	...	...	...	20%
White Bran	...	...	...	10%
Meat Meal (60% Protein)	...	...	...	10%

THE CATTLE INDUSTRY (EMERGENCY PROVISIONS) ACTS, 1934 AND 1935 AND THE LIVESTOCK INDUSTRY ACT, 1937.

The following is a summary made under these Acts up to and including 25th June, 1938.

<i>Live Weight</i>		<i>Number of Animals</i>	<i>Total Amount paid</i>		
			£	s.	d.
England and Wales	..	4,183,757	10,094,304	5	8
Scotland	..	1,286,043	3,294,088	15	4
Northern Ireland	..	441,685	928,340	3	2
Total (United Kingdom)	..	5,911,485	14,316,733	4	2
<i>Dead Weight</i>					
England and Wales	..	133,342	334,888	12	0
Scotland	..	38,726	108,744	1	8
Total (Great Britain)	..	172,068	443,632	13	8

NUMBERS CERTIFIED FOR SUBSIDY.

The numbers of fat cattle certified for payment of subsidy, published by the Livestock Commission in respect of the month of May, 1938, are shown hereunder :—

	May, 1938					Corresponding totals in	
	Home-bred		Imported		Total	May, 1937	May, 1936
	Ordinary Grade	Quality Grade	Ordinary Grade	Quality Grade			
England ..	28,950	34,219	8,092	14,674	85,935	93,844	87,414
Wales ..	2,216	1,293	30	56	3,595	3,530	3,855
Scotland ..	2,700	16,631	1,161	12,755	33,247	34,538	33,177
Northern Ireland	5,452	1,451	369	150	7,422	7,677	9,510
United Kingdom	39,318	53,594	9,652	27,635	130,199	139,589	133,956

As the great majority of fat stock markets are held on the early days of the week the rate of marketing of fat cattle cannot be judged accurately from the number of animals marketed in a calendar month. For comparative purposes appropriate weights are applied by the Livestock Commission to each day of the week, and the figures for each calendar month are adjusted accordingly, so as to allow as far as possible for the fact that a large number of markets are held on Mondays, and that the number of markets held decreases day by day as the week proceeds. The adjusted figures for May, 1938, 1937 and 1936, are 121,604, 137,042 and 140,519 respectively.

The average prices per live cwt. of certified cattle in May, 1938, were :—

	May, 1938						Corresponding averages in			
	Ordinary Grade		Quality Grade		Average		May, 1937		May, 1936	
	s.	d.	s.	d.	s.	d.	s.	d.	s.	d.
England	41	7	44	1	43	1	—	—	—	—
Wales	42	10	46	1	44	2	—	—	—	—
England & Wales ..	41	8	44	2	43	2	42	9	36	0
Scotland	40	9	43	9	43	5	44	7	36	7
Northern Ireland ..	40	4	41	6	40	8	41	11	32	1
United Kingdom ..	41	5	43	11	43	1	43	2	35	10

LIVESTOCK INDUSTRY ACT, 1937.

REVISION OF STANDARDS OF ELIGIBILITY FOR SUBSIDY.

The regulations defining the standards of eligibility for subsidy under the Livestock Industry Act have been revised so far as quality standard (or super grade) is concerned.

The requirements that an animal shall have an estimated killing-out percentage of not less than 57 per cent. to be eligible for the quality standard is withdrawn, and animals will, in future, be divided into ordinary and quality standard solely by reference to their conformation, finish and ripeness.

It is emphasised that the alteration in the Regulations does not involve any lowering of these standards. On the contrary, the effect of the alteration should be to give further encouragement to the production of good quality fat cattle.

Cattle to be eligible for any standard must have an estimated killing-out percentage of not less than 54 per cent.

AGRICULTURAL NOTES.

SEASONAL FARM NOTES.

HAY.—Hay-making will be a work of primary importance at this time on practically all farms. Hay that is cut at the proper stage of growth, and is well saved, has a much higher feeding value than hay that has been allowed to become over-ripe before being cut and, accordingly, every effort should be made to have the crop cut early and saving carried out under the best conditions possible. Weather conditions, of course, govern to a very considerable extent the carrying out of these operations, but provided that these are suitable, the earlier that hay-making can be completed, the more satisfactory will be the results from the point of view of securing good hay of a high nutritive value.

Excessive exposure of hay to rain and sun is a common cause of loss and of a reduction in its feeding value. Too often the field "ricks" are allowed to remain an unnecessarily long time in the field before stacking. This procedure results in damage to the hay on the outsides and at the bottoms of the ricks, and also prevents proper utilisation of the aftermath for stock-feeding. The ricks should, therefore, be carted and stacked as soon as the hay is considered to be in a fit condition for this to be done with safety.

Hay which is intended for seed-saving should not be cut before it is fully ripe, otherwise the yield and quality of the seed will be considerably reduced. Only good, well-grown and clean crops of hay should be reserved for this purpose, as the financial return from crops containing weeds and useless grasses is rarely sufficient to cover the extra expense of seed-saving.

SPRAYING OF POTATOES.—Spraying of the potato crop, if not already done, should be carried out immediately. It must be remembered that spraying is a preventive of blight, and not a cure, so that the operation should be carried out before the crop shows any signs of the disease. One spraying is not normally sufficient to give protection against blight throughout the growing season, and a second application should be given after an interval of about three weeks. In wet seasons, a third spraying is usually necessary to ensure that the crop will have a full growing period, and is essential in the case of late-planted crops.

The Burgundy mixture, made by dissolving 8 lb. copper sulphate (blue-stone) in 35 gallons of water and adding to this a solution of 10 lb. washing soda in 5 gallons of water, has consistently given good results under Northern Ireland conditions, and the use of this mixture is recommended. In comparison with this treatment the dusting of the crop with dry powders has not proved so reliable as a preventive of potato blight, and the use of such powders is considered to be advisable only where there is particular difficulty in arranging for the application of a wet spray.

The importance of spraying the potato crop will be realised when it is remembered that not only is the yield from an unsprayed crop reduced as a result of the shorter growing season of the crop, but also that there is a considerable loss in storage from blighted tubers where the disease has been washed by rain from the stalks and leaves and brought into contact with potatoes which are growing fairly near to the surface of the ground.

“ROGUEING” OF POTATOES.—The examination of potato crops for the presence of plants of varieties other than that being grown and of plants visibly affected with such diseases as leaf-roll and mosaic should be carried out periodically throughout the growing season. All potatoes of a wrong variety, or showing signs of disease, should be dug up immediately they are recognised, in order to avoid deterioration in the purity and health of the crop. It is important when carrying out this work to collect all the tubers from the plants which are being removed, so as to ensure that they will not be left in the ground until digging time, and subsequently be included by mistake amongst the seed for next year.

A high degree of purity and health is required before a crop of potatoes can qualify for a purity certificate, and accordingly the attention of growers of certified seed in particular is directed to the necessity for persistent “rogueing”.

TURNIPS.—Frequent hoeing of the turnip crop after singling will assist in keeping down weeds until the plants are sufficiently well grown to have the necessary smothering effect on “soft” weeds. Such cultivation will also promote the growth of the crop and help to ensure good yields.

PASTURE.—Fields which have not been stocked sufficiently heavily to prevent the grasses from shooting and running to seed, will benefit exceedingly from top-mowing now. The growth of fresh leafy bottom grasses will thereby be promoted, and the subsequent sward will be of better grazing value than the stemmy grasses which would otherwise be predominant. The adoption of this practice on a large scale would be of great benefit to the majority of pastures, and it is strongly recommended that the mowing machine, having the cutting bar set high, be run over the pasture fields at this time. If grass is very plentiful, and the number of stock is insufficient to keep it under reasonable control by grazing, a field should be closed off, rested for two or three weeks, and then mown for hay. This will give an additional quantity of fodder for winter use, and will also help to freshen the pasture for future grazing.

WEEDS.—The destruction of weeds, including thistle, dock, ragwort (“ragweed” or “benweed”) and ox-eye daisy or “dog” daisy, should be completed at once. Farmers are reminded that it is an offence to permit these weeds to grow until after the seeding stage has been reached, and inspections

by the Royal Ulster Constabulary are now being made to ensure that the provisions of the Weeds Act are being carried out. In the case of grassland the destruction of weeds can be done at the same time as the "shot" grasses are being cut with the mowing machine, as advised above. The objection, sometimes advanced, that the cutting of weeds in pastures cannot be done without damaging the pasture is founded on a fallacy, and even if the cutting of weeds was not a legal obligation it would be a sound practice from the point of view of improving the pasture as well as of preventing the spread of weeds.

SEASONAL LIVESTOCK NOTES.

MILK PRODUCTION.—As the season advances, the feeding value of pastures tends to decrease and, therefore, it becomes necessary, except in the case of very good pastures, to feed an allowance of concentrates to the higher yielding cows in order to maintain milk production at a high level. A simple mixture for the purpose is equal parts crushed oats, maize meal, and decorticated earthnut cake, or 2 parts maize meal to 1 part decorticated earthnut cake. It is advisable to commence this supplementary feeding immediately there is the slightest evidence of a tendency towards declining yields, otherwise milk production may receive a check from which it will not readily recover.

During warm weather, care should be taken to see that the keeping quality of milk does not suffer. The principal points to be observed are strict cleanliness throughout the operation of milking, followed by efficient cooling. Attention to these details will go far towards ensuring that the milk will remain sweet for a reasonable period. Helpful information on this subject is available in Leaflet No. 39.

WEANING OF CALVES.—When calves have reached the weaning stage, the milk supply should be withdrawn very gradually, and an increased amount of meals should then be fed. A suitable mixture after the milk has been finally withdrawn is 2 lb. crushed oats and 1 lb. linseed cake per head daily. The mixture should be fed dry, and must not be given in a wet or partly cooked condition, otherwise there will be a serious risk of poisoning (read Leaflet No. 19—How to Feed Linseed). The aim should always be to keep the animals in a forward thriving condition.

SHEEP.—Careful watch must be kept for signs of attack by the sheep-maggot fly. This pest is particularly in evidence during damp, sultry weather, and sheep and lambs which have wet or dirty wool, especially in the region of the tail, are very liable to be "struck". Special attention should, therefore, be paid to animals which are scouring, and all tangles of dirty wool around the hindquarters should be clipped off. It is advisable, if at all possible, to see the flock twice a day when the pest is rife. Affected sheep should be

dressed with carbolic sheep dip on the parts which are "struck", and after the maggots have been removed, the sores should be treated with an ointment composed of powdered sulphur mixed with either fresh lard or linseed oil.

Preparation should be made at this time for the weaning of the lambs, and with this end in view, a field of good, short fresh pasture should be reserved for the lambs when the time comes for their removal from the ewes. Lambs should receive good treatment at this stage, otherwise they may experience a severe setback. Care should also be taken to see that the udders of the ewes do not become unduly distended with milk for the first day or two after the lambs have been removed, and it is advisable at this stage to put the ewes on the poorest pasture available until they have been dried off.

PIGS.—Advantage should be taken of every opportunity to turn out sows, either in-pig or with litters at foot, for a run on pasture. This procedure will not only reduce feeding costs, but will be of material benefit to the health of the pigs. The only precaution to be observed is to beware lest the young pigs suffer from sunburn on hot, sunny days.

Attention is again drawn to the necessity for the exercising of greater care by feeders in the choice of the rations for fattening pigs. It is evident that as the result of the use of unsuitable foods, some of the bacon that is produced has a soft, oily fat, and is of inferior quality. Feeders are advised, therefore, to refrain from using fish meal, linseed cake meal, or cod-liver oil in the rations for fattening pigs. It is also undesirable to include in the ration an excessive proportion of maize meal, the oil of which tends also to have a softening effect on the bacon. Under no circumstances should the proportion of maize meal or other maize products such as flaked maize exceed 35 to 40 per cent. of the ration.

Where separated milk is available, there is no need to include any protein food in the ration, but if supplies of milk are scarce, the use of a high-grade meat meal, or of soya bean meal, will be necessary to provide a suitable protein supplement for fattening pigs.

SEASONAL GARDEN AND ORCHARD NOTES.

SPRAYING APPLE TREES.—The final application of Bordeaux mixture should be given to apple trees about the last week of July. Half-strength mixture should be used, that is 1 lb. bluestone, $4\frac{1}{2}$ lb. hydrated lime and 40 gallons water.

MARKETING EARLY APPLES.—Arrangements for the marketing of early apples should be made and supplies of the necessary containers should be obtained in good time.

STRAWBERRIES.—Strawberry runners for planting in August should be selected now from heavy-cropping healthy plants. The selected runners should be layered on the soil between the rows of plants so as to ensure satisfactory rooting.

As soon as the crop of strawberries has been gathered the plantation should be cleared of all weeds, straw, damaged foliage and surplus runners. The ground between the plants should then be lightly hoed and some of the loose soil should be drawn up around the plants. In no circumstances should the ground between the plants be dug with a spade as this causes much damage to the roots.

BUSH FRUITS.—As soon as the crop of black currants has been gathered some of the older branches in each bush should be cut out so as to assist the development of the young branches on which next year's crop will be borne.

Raspberry and loganberry canes which have fruited this year should also be cut out as soon as the fruit has been gathered and the young canes tied in their places so as to preserve them from damage by wind.

VEGETABLES.—Seeds of spring cabbage may be sown in early districts about the third week of July. The seed bed should be made fine and the seed sown in rows. The soil should not be manured.

A sowing of parsley should be made now for use next spring, and a sowing of garden turnip of the variety Golden Ball to provide a supply of roots for use during winter.

Early in August a sowing of early cauliflower should be made on moderately rich ground in a way similar to that advised for spring cabbage. The resulting plants should be transplanted early and wintered in a cold frame. About the second week of August a sowing of lettuce for spring use should be made. Suitable varieties for this purpose are May Queen, Tremont Winter or Feltham King. The young plants should be transplanted towards the end of September.

The varieties of onions known as Unwin's Reliance and Sutton's Solidity are recommended for sowing in early August to provide bulbs the following summer. Tripoli onions also should be sown in August; Red Italian and Lemon Rocca are suitable varieties.

As soon as the foliage of shallots and potato onions has ripened the bulbs should be lifted and spread on some hard surface to dry. The bulbs should be protected from rain during harvesting.

Towards the end of July early white varieties of celery should be ready for the first moulding up. Side shoots should first be removed, and care must

be taken to see that none of the soil gets into the centre of the plants. The plants should be sprayed regularly with half-strength Burgundy mixture to protect them from celery blight.

FLOWERING PLANTS.—Many flowering shrubs can be readily propagated by means of cuttings of half-ripened shoots taken now and inserted in sandy soil in a shaded place. Many herbaceous plants, such as geraniums, violas, calceolarias, aubrietia, etc., can also be propagated by making cuttings now of the young shoots. Carnations may be propagated by layering.

SEASONAL POULTRY-KEEPING NOTES.

PULLETS.—From this time onward, the early-hatched pullets will be commencing to come into lay. While they should not, on any account, be forced to come into production too soon, it is also important to see that they do not suffer any check in growth and development, such as might be caused by stinted feeding. Arrangements should be made for the transfer of the pullets from the rearing ground to their permanent quarters before they commence to lay, otherwise there is a danger that they may suffer a setback caused by the change, or even moult, with a consequent loss of production.

The handling of the birds at the time of transfer to their permanent quarters will afford a suitable opportunity for culling out all pullets which are not likely to be profitable layers. The culling of pullets should be very thorough at this stage, and where there is the slightest doubt about the ability of a bird to stand up to the strain of egg production, she should not be included in the flock but culled out for sale for table purposes.

If pullets appear to be doing badly and are slow in thriving, attention should be paid to the management and housing, as failure to thrive well is frequently due to overcrowding and to insufficient ventilation. It is helpful in such cases to move the birds to fresh ground, but additional house space must also be provided. The possibility of infestation with insect parasites also should not be overlooked, and if these are present, it is advisable to adopt the control measures recommended in last month's Report.

CARE OF EGGS.—Producers are reminded of the importance of marketing only fresh, clean, infertile eggs which are likely to reach the consumer in good condition. One of the principal causes of poor quality at this time of year arises from the partial incubation of the eggs by broody hens sitting on the nests, and, accordingly, the broodies should be removed from the nests immediately they are noticed, and placed in a separate coop and fed well, to bring them back into production with the minimum of delay. Allowing the eggs to cool thoroughly before putting them into an egg case or other receptacle for storage, and storage in a cool, well-ventilated room are further points of importance in maintaining the quality in eggs.

SELECTION OF FUTURE BREEDING STOCK.—Birds which are one year old or over should now be examined with a view to selecting those which are most suitable for next season's breeding pens. Only the best birds should be retained for the purpose, and special attention should be paid to the selection of sturdy, large-bodied birds which show evidence of stamina and of ability to live and lay. If a bird shows any signs of weakness in constitution she should be rejected for breeding purposes no matter how good her egg record may be, and the temptation to include such a bird in a breeding pen, because of her egg record, should be rigorously resisted.

The birds thus selected for breeding should be encouraged to go into a moult and to cease laying, in order that they may be ready to produce eggs for hatching early in the breeding season. To do this a change of ground, housing, and food is necessary, and such change should be made now. The upsetting effect of the change is sometimes sufficient to bring about the desired moulting, but more drastic treatment is usually necessary. The hens should preferably be put out in a field in a portable house, and be fed grain only, or grain with a very limited quantity of a mash in which no protein supplement has been included. A suitable grain feed is equal parts of whole wheat and oats, or oats only, and the quantity fed should be rather limited. The birds should be fed twice daily, and the quantity given should be regulated so that the birds will be really hungry for the next feed. An ample supply of water should, of course, be provided.

When the birds begin to show signs of going into a general moult, the allowance of food should be more liberal, and the feeding of mash may then re-commence. Forcing at this stage should be avoided, and an allowance of good, plain, nourishing food, such as a mixture of bran, ground oats, and pollard, with a little maize meal is recommended in order to build up body condition without encouraging the production of fat. Full details of the method advised for the force moulting of hens are given in Leaflet No. 83.

COCKERELS FOR BREEDING.—Cockerels intended for breeding purposes should be kept out on free range in order that they may develop slowly and naturally into sturdy, vigorous stock birds.

TABLE DUCKLINGS.—Ducklings intended for table use should be well treated in order that they may be ready for marketing before they are 10 weeks old. After this age, the birds begin to grow their adult feathers, and a further period of about 6 weeks elapses before they will be suitable for market. During the last fortnight of fattening, a ration of barley meal and Sussex ground oats, wet with separated milk or buttermilk, should be fed in order to obtain a firm flesh of good quality.

TURKEYS.—When the birds have reached the red-head stage, they are capable of foraging for most of their requirements of green food. The morning mash should be given before the birds are allowed out, and the evening feed should be on generous lines, so that the crops are full before the turkeys go to roost. Suitable rations for young turkeys are given in Leaflet No. 37.

ANNOUNCEMENTS AND REMINDERS.

INSPECTIONS OF POTATO CROPS.—Inspections of growing crops of potatoes for purity certificates are now in progress. Growers who wish to have their crops inspected, and who have not already done so, should apply immediately to the Ministry, or to the local Potato Inspector.

DESTRUCTION OF WEEDS.—Landowners should arrange to have all noxious weeds destroyed in good time. Inspection work in this connection is now being carried out by members of the Royal Ulster Constabulary, and farmers are reminded that failure to comply with the provisions of the Weeds Act may lead to a prosecution.

LICENSING OF BULLS.—The inspections for the licensing of bulls will be carried out during August. Applications for inspections should reach the Ministry not later than the 31st July next, and should be made on the prescribed form, which is obtainable from the Ministry or at any Police Barracks.

SHEEP DIPPING.—Sheep owners are again reminded that the summer period for the compulsory double dipping of sheep commenced on the 15th June, and terminates on the 15th August. During this period all sheep must be dipped twice, with an interval of not less than seven or more than fourteen days between the dippings.

GREENMOUNT AGRICULTURAL AND HORTICULTURAL COLLEGE.—Applications for the Scholarships to this College, which are offered by the County Committees of Agriculture, should be made to The Secretary, County Committee of Agriculture, before 30th July. Particulars of the courses of instruction are given in the prospectus, copies of which can be obtained free on request from the Secretary, County Antrim Committee of Agriculture, Courthouse, Crumlin Road, Belfast, or from the Ministry.

UNIVERSITY SCHOLARSHIPS.—Particulars of the valuable Scholarships in Agriculture and Horticulture which are tenable at Queen's University, Belfast, and at the University of Reading, are obtainable from the Ministry, on request.

APPLICATIONS FOR BLOOD TESTING.—Applications for the blood testing of poultry for Bacillary White Diarrhoea should be made to the Poultry Instructor for the district, or to the Secretary, County Committee of Agriculture, at the earliest date possible, and in all cases before the 1st August.

STORMONT EGG-LAYING TEST.—The next Egg-Laying Test at Stormont begins on the 1st October, 1938, and copies of the rules will soon be available from the Ministry, or from the Poultry Instructors. The test gives to breeders a splendid opportunity for ascertaining the quality of their birds, and in addition, it should be noted that birds which qualify for copper rings are eligible for entry at the Official Breeding Station, Hillsborough.

ACCREDITED POULTRY FARMS SCHEME.—Poultry keepers are reminded that if they are to be considered for free blood-testing under the Accredited Poultry Farms Scheme, applications for the registration of their farms must be sent to the Ministry before 1st August, 1938. The ordinary fees which are charged for blood testing will apply in the case of farms for which registration is requested after 1st August. Forms of application for registration and full particulars of the Scheme may be obtained from the Ministry or from the local Poultry Instructor.

COUNTY POULTRY STATIONS.—Applications to keep poultry breeding stations under the Scheme administered by County Committees of Agriculture should be sent to the Secretary of the County Committee without delay. In the case of farms selected for stations, the blood testing of the birds will be carried out free of charge. Full particulars and copies of the Scheme can be had from the Secretary of the County Committee of Agriculture.

NAMES AND ADDRESSES OF SECRETARIES AND AGRICULTURAL ORGANISERS OF COUNTY COMMITTEES OF AGRICULTURE.

County	Name and Address of Secretary or Organiser.
Antrim ..	A. B. Clarke, B.A. (Secretary), Courthouse, Crumlin Road, Belfast.
Armagh ..	S. Jordan, B.Agr. (Organiser), Russell Street, Armagh.
Down ..	J. L. M'Whinney, B.Sc., A.R.C.Sc.I. (Organiser), Northern Bank Chambers, May Street, Belfast.
Fermanagh ..	W. T. M'Clintock, B.Agr. (Organiser), Courthouse, Enniskillen.
Londonderry ..	T. K. Caldwell (Secretary), Courthouse, Coleraine.
Tyrone ..	W. Walsh (Secretary), Courthouse, Omagh.

NATIONAL PIG BREEDERS' ASSOCIATION ESSAY PRIZE.

The National Pig Breeders' Association offers for competition each year a medal and money prize for the best essay on some subject connected with the pig industry. The prize, which is known as the "Paget Memorial Prize", is open for competition amongst agricultural students in Great Britain and Northern Ireland, members of Young Farmers' Clubs, and sons and daughters of members of the National Pig Breeders' Association, not over 30 years of age. The awards for this year have been announced recently, and it is gratifying to note that the medal and first prize have been won by Mr. Samuel Busby, Gransha, Islandmagee, County Antrim, who is at present a student at Greenmount Agricultural and Horticultural College, Muckamore, County Antrim. The subject of the winning essay was "The Housing of Pigs as a Factor in Promoting Health".

SCHOOL NEWS.

ULSTER DAIRY SCHOOL, COOKSTOWN.

The second term of the year 1938 terminated on the 17th June last, and the results of the examinations held at the end of the term are announced.

Miss S. M. Hamilton, Killycolp House, Tullyhogue, Dungannon and Miss R. G. Walker, Hillhall, Lisburn, who are pursuing the Senior course for teachers-in-training, passed the examinations and are continuing their training.

The following third-term pupils, who obtained first, second and third place respectively in the examination, reached the standard for admission to the Senior course of training :—

Miss M. Caskey, Edenmore House, Limavady, County Londonderry;
Miss E. F. Martin, Ferndale, Dromore, County Down;
Miss J. S. Fulton, Thornhill, Ballykelly, County Londonderry.
Miss A. Shankey, Sessia Scot, Rock, Dungannon, Miss W. G. Orr, Mealough House, Purdysburn, Belfast and Miss M. B. Jones, Bar of Slattanagh, Garrison P.O., County Fermanagh, who attained a high standard in the examination for third term pupils gained certificates in all subjects and have been awarded free Scholarships to specialise in Dairying, Poultry-keeping and Domestic Science respectively for a further term at the School.

The following additional third-term pupils were successful in qualifying for certificates in Poultry-keeping, Dairying and Domestic Science :—

Miss M. G. Atchison, Woodbury, Eglinton, County Londonderry.
Miss P. G. Corr, Bluestones, Killyleagh, County Down.
Miss F. O. Gilmer, Rashee, Ballyclare, County Antrim.
Miss K. Gormley, Carnanreagh, Claudy, County Londonderry.
Miss H. M. E. Kyle, Mournebeg, Strabane, County Tyrone.
Miss M. I. Logan, Brae-side, Portstewart, County Londonderry.
Miss E. M'Cluney, Dunsilly, Antrim, County Antrim.
Miss S. M'Cormack, Tulnacross, Cookstown, County Tyrone.
Miss B. M'Kenna, Dernasell, Augher P.O., County Tyrone.
Miss M. Maguire, Roscor, County Fermanagh.
Miss M. C. Martin, Longstone House, Annalong, County Down.
Miss M. E. Patterson, Laurel Bank, Omagh, County Tyrone.
Miss I. Stewart, Ballymacpeake, Portglenone, County Londonderry.
Miss J. M'C. Wood, Woodmount Poultry Farm, Herdstown, Donaghadee, County Down
Miss M. M'Eldowney was successful in qualifying for the Ministry's Certificate in Domestic Science.

The next term at the School will commence on the 11th October and terminate on 23rd December, 1938. Applications for admission to this term are now being received by the Ministry, and girls who intend to take out a course of training should submit their applications to the Ministry as soon as possible, as equally eligible applicants are admitted to the School in the order in which their applications are received. There is no qualifying examination for admission. Copies of the prospectus, containing application forms, may be obtained free of charge from the Secretary of any County Committee of Agriculture, from the local Instructor in Poultry-keeping, from the Lady Superintendent, Ulster Dairy School, Cookstown, or from the Secretary, Ministry of Agriculture, Stormont, Belfast.

NORTH-WEST SCHOOL, STRABANE.

The second term of the year 1938 at this School ended also on the 17th June, and there were 25 pupils in the class, all of whom held Scholarships awarded by the various County Committees of Agriculture. The number of Scholarship holders from each County was as follows:—

County Antrim	..	..	4
County Armagh	..	..	5
County Down	..	..	5
County Fermanagh	..	..	2
County Londonderry	..	..	3
County Tyrone	..	..	6

The third term of the year began on the 19th July, and the names and addresses of the holders of Scholarships from the various County Committees will be given in the next issue of this Report.

Each County Committee of Agriculture is offering a number of Scholarships to cover the cost of tuition, board and residence at the School, for the term which will commence on 11th October, 1938. Candidates who wish to be considered for the award of these Scholarships should submit their applications as soon as possible to the Secretary or Agricultural Organiser of the County Committee of Agriculture for the County in which they reside.

SCHEME OF GRANTS FOR BLACK-FACE RAMS.

Arrangements are being made by the Ministry whereby the above-named Scheme will be rendered more attractive to farmers. Hitherto the Scheme provided for the payment of a grant not exceeding one-half of the purchase price, the maximum grant being £5. It has now been arranged that where the cost of the ram does not exceed £10 the selected applicant will merely be required to pay £3 towards the purchase price, and where the ram costs more than £10 the contribution required from the applicant will be £3 plus the amount by which the purchase price exceeds £10. In other words, the maximum grant from the County Committee of Agriculture is now increased from £5 to £7. With this prospect of a reduced financial commitment it is hoped that farmers will be encouraged to acquire rams of superior quality, thereby raising the general standard of flocks in the mountain areas to which the Scheme applies. This increased measure of assistance towards the purchase of rams under the Scheme will apply to purchases made by selected applicants at the forthcoming Ram Sales arranged by the Ulster Ram Breeders' Association, which will take place at Messrs. Allam's and Robson's Marts, Belfast, in August and September next, so that farmers interested would be well-advised to get into touch with the Secretaries or Organisers to their County Committees without delay.

SCHOLARSHIPS TO GREENMOUNT AGRICULTURAL AND HORTICULTURAL COLLEGE, 1938/39.

Each County Committee of Agriculture in Northern Ireland offers for competition this year Scholarships in Agriculture and Horticulture, tenable at Greenmount Agricultural and Horticultural College, Muckamore, County Antrim, for the session 1938/39. An attractive opportunity is thus offered farmers' sons in Northern Ireland to secure a sound training in Agriculture or Horticulture through the medium of these Scholarships which entitle the holders to free tuition, board and residence.

Greenmount College is situated about one mile from Antrim, in a good agricultural district and amidst pleasant surroundings. Classrooms, laboratories, etc., are set apart for the different subjects in which indoor instruction is given, and these are fully equipped with the necessary apparatus. The farm attached to the College extends to over 240 acres, and besides the instruction provided in practical agriculture and the experience obtained in the running of the farm, the students receive practical instruction in Poultry Husbandry, Dairying, Veterinary Hygiene, Woodwork, Vegetable Growing, Fruit Cultivation and Bee-keeping.

The course is primarily intended to give students a sound knowledge of Agriculture or Horticulture, and of the sciences relating thereto, such as will be of use to them in their future careers. It is also an excellent preparation for students desirous of competing for University Scholarships which are offered each year by the Ministry of Agriculture.

Intending candidates should communicate immediately with the Secretary (or Agricultural Organiser) of the County Committee of Agriculture for the County in which they reside, from whom the prescribed form of application may be obtained. The completed form of application must be sent to the Secretary or Organiser so as to reach him before 30th July, 1938.

COLORADO BEETLE IN SWITZERLAND.

In consequence of the spread into Switzerland of Colorado Beetle, an insect most destructive of certain classes of plants, and of potato crops in particular, the Ministry of Agriculture for Northern Ireland, acting in co-operation with the Agricultural Departments in Great Britain, has made an Order entitled "Importation of Plants (Northern Ireland) (Amendment) Order of 1938", which imposes restrictions on the importation into this country from Switzerland of certain kinds of horticultural produce. Similar restrictions are already in force in the case of imports of horticultural produce from France, Germany, Belgium and Luxemburg.

The main provisions of the Order, which came into force on 13th June, 1938, are as follows:—

The usual official health certificate required from the Swiss authorities in respect of living plants, potatoes, raw vegetables and cider apples imported from Switzerland must include a statement in one or other of two alternative forms, viz. :—

- (a) That the produce was grown outside a radius of 50 kilometres from the nearest point where the Colorado Beetle exists, or is known to have existed.
- (b) That the produce is of a kind the importation of which is permitted under the terms of a General Licence issued by the Ministry of Agriculture for Northern Ireland.

Alternative (b) is not applicable to potatoes.

In the case of flower bulbs, cucumbers, and mushrooms, a statement in either of the forms above-mentioned is not required.

So far as raw vegetables and cider apples are concerned the special statements above-mentioned are required in respect only of imports during the period from April 21st to October 14th in any year.

SIXTEENTH EGG LAYING TEST AT STORMONT.

The tenth period of four weeks ended on the 7th July, 1938. There was a further decrease in egg production and an increase in the number of scoring eggs. The total number of eggs laid during the period was 10,081 which, on the basis of the entire original flock, gives an average of 14.23 eggs per bird. Of this number 8,942 or 88.7 per cent. were scoring eggs (super grade and first grade). The average egg production for all birds originally penned is 149.44 as compared with 158.9 for the first 40 weeks of the previous test.

The highest average sectional egg production is to the credit of the White Leghorns in Section 2, viz., 16.0 eggs per bird, the Rhode Island Reds in Section 3 being next with an average of 14.7 eggs per bird. Twelve birds died during the period, bringing the number of deaths to 87. This represents a mortality rate of 12.28 per cent. as compared with 7.1 for the corresponding period in the previous test.

The following are particulars of the leading pens in each Section at the end of the tenth period:—

SECTION 1. WHITE WYANDOTTES (OPEN). 22 Pens.

Position	No. of Pen	Name and Address of Owner.	Number of eggs laid.				Test Score
			Super Grade	1st Grade	2nd Grade	Below 2nd Grade	
1	10	Mrs. J. R. Jackson, Fortview, Coleraine, Co. Londonderry.	261	710	161	5	971
2	4	Mrs. H. G. Darley, Trory, Ballinamallard, Co. Fermanagh.	383	554	76	3	937
3	7	Lt.-Col. J. P. Galbraith, Clanabogan, Omagh, Co. Tyrone.	455	465	46	1	920
4	9	Greenmount Agricultural & Horticultural College, Muckamore, Co. Antrim	142	758	193	4	900

SECTION 2. WHITE LEGHORNS (OPEN). 9 Pens.

1	29	Mr. J. Stevenson, Maze View, Corcreeny, Hillsborough, Co. Down.	422	576	112	9	998
2	31	Mr. J. O. Turkington, Derryinver, Lurgan, Co. Armagh.	675	268	13	1	943
3	26	Mr. T. J. M'Millan, Crossgar, Co. Down.	518	329	27	—	847

SECTION 3. RHODE ISLAND REDS (OPEN). 26 Pens.

1	39	Mrs. Hamilton Farr, Elsneuk, Dundrum Road, Newcastle, Co. Down.	668	382	26	1	1050
2	49	Mrs. J. McNeill, Drain's Bay, Larne, Co. Antrim.	466	570	40	—	1036
3	43	Miss E. E. Kennedy, Tullyreagh, Glarryford, Co. Antrim.	529	428	23	—	957
4	57	Mr. H. Ramsey, Sylvan Cottage, Gilnahirk, Belfast.	430	523	105	—	953

SECTION 4. ANY OTHER PURE BREED (OPEN). 15 Pens.

1	67	Mr. R. Holmes, Moneycarrie, Killykeegan, Coleraine, Co. Londonderry. (Buff Rock.)	757	324	12	1	1081
2	68	Mr. R. Holmes, Moneycarrie, Killykeegan, Coleraine, Co. Londonderry. (Buff Rock.)	584	385	89	3	969
3	73	Mrs. J. W. Murland, Ardnabannon, Annsborough, Co. Down (Light Sussex)	579	250	17	1	829

SECTION 5(a). WHITE WYANDOTTES (STATIONHOLDERS). 9 Pens.

Position	No. of Pen	Name and Address of Owner.	Number of eggs laid.				Test Score
			Super Grade	1st Grade	2nd Grade	Below 2nd Grade	
1	76	Miss A. Brown, Ballyhill, Crumlin, Co. Antrim.	219	650	256	2	869
2	81	Miss A. Peel, Aghadalgan, Roses Lane Ends, Belfast.	506	359	77	2	865
3	82	Mrs. M. Rodgers, Ballyginney, Dundrum, Co. Down.	432	370	61	—	802

SECTION 5(b). WHITE LEGHORNS (STATIONHOLDERS). 7 Pens.

1	89	Miss I. Gilmer, Rashee, Ballyclare, Co. Antrim.	519	516	31	1	1035
2	90	Mrs. J. Knox, Shanmullagh, Ederney, Co. Fermanagh.	299	558	71	—	857
3	91	Miss I. J. Magill, Mulloughdrin, Dromara, Co. Down.	657	178	108	4	835

SECTION 5(c). RHODE ISLAND REDS (STATIONHOLDERS). 18 Pens.

1	102	Mrs. R. M'Giffert, Rathcunningham, Toye, Belfast.	515	518	47	—	1033
2	93	Mr. H. H. Dickson, Lower Coagh, Co. Tyrone.	461	459	33	2	920
3	110	Mrs. J. W. Stewart, Boghill, Coleraine, Co. Londonderry.	427	484	125	1	911

SECTION 6. POULTRY CLUBS AND YOUNG FARMERS' CLUBS. 12 Pens.

1	116	Banbridge and District Poultry Club, Co. Down. (Rhode Island Red.)	281	618	120	10	899
2	115	Ballywalter Young Farmers' Club, Co. Down. (White Wyandotte.)	494	378	131	11	872
3	114	Ballywalter Young Farmers' Club, Co. Down. (Rhode Island Red.)	332	415	64	1	747

Test Score means the total of the super grade and first grade eggs.

Mr. R. Holmes' pen, No. 67, of Buff Rocks in Section 4, holds 1st place in the entire test, while pen No. 39 of Rhode Island Reds in Section 3, entered by Mrs. Farr, is second. Mrs. J. McNeill's pen, No. 49, of Rhode Island Reds in Section 3 retains third place.

PRICES OF FEEDING STUFFS AT SPECIFIED CENTRES.

The following table shows the retail cash prices per cwt. of Feeding Stuffs at 1st July, 1938, in ten representative centres in Northern Ireland.

	Antrim	Armagh	Ballymena	Belfast	Castellwellan	Cole-raine	Dun-gannon	Ennis-killen	Omagh	Stras-bane
Protein Foods :	s. d.	s. d.	s. d.	s. d.	s. d.	s. d.	s. d.	s. d.	s. d.	s. d.
Linseed (whole) ..	—	17 0	16 0	16 0	20 0	20 0	—	17 0	—	—
Linseed Cake, home-made ..	—	13 0	11 9	12 0	—	—	13 6	12 6	12 0	11 0
Linseed Cake, foreign ..	11 3	11 6	10 6	11 0	11 6	12 0	11 0	10 9	11 0	—
Linseed Cake Meal ..	11 3	13 0	10 6	11 0	—	11 6	11 6	12 0	11 0	—
Cotton Cake, decorticated ..	9 6	—	9 0	10 6	9 9	9 6	—	10 6	10 0	10 3
Earthnut Cake, decorticated ..	9 0	—	9 0	8 6	—	9 0	—	9 0	9 6	9 9
Soya Bean Meal (extracted) ..	10 0	11 0	11 0	10 0	—	11 0	11 0	11 0	11 6	—
Fish Meal (60% protein) ..	17 0	16 6	16 6	16 6	—	17 0	17 0	17 6	17 0	17 6
Meat Meal (60% protein) ..	16 6	15 6	14 0	14 0	14 0	—	16 0	—	16 0	—
Meat & Bone Meal (40% protein)	—	11 0	10 3	9 6	—	11 6	10 6	—	—	11 0
Medium Protein Foods :										
Palm Kernel Cake ..	9 6	—	9 0	—	—	9 6	—	—	9 6	—
Palm Kernel Meal ..	9 6	9 0	9 0	—	—	9 6	—	9 6	—	—
Starchy Foods :										
Maize (whole) ..	7 0	7 6	7 6	7 0	—	7 9	7 6	7 6	—	7 3
Maize Meal ..	7 10½	7 9	7 7½	7 3	7 9	7 9	7 9	7 10	7 9	8 3
Maize Flaked ..	8 4½	8 6	8 0	8 0	8 0	8 6	8 6	8 6	8 6	9 0
Wheat (whole) ..	9 6	10 6	9 0	10 0	11 6	10 0	9 6	10 0	9 9	—
Bran, Red ..	8 9	9 0	8 9	9 0	—	9 3	8 6	9 0	9 0	8 0
Bran, White ..	9 9	10 0	9 8	10 0	10 0	10 0	10 0	10 3	10 6	9 6
Pollard, Brown ..	8 9	9 0	8 6	9 0	—	8 9	8 6	9 6	9 0	8 6
Pollard, White ..	—	10 0	9 0	10 0	10 0	9 0	10 0	10 3	10 0	9 6
Barley Meal ..	9 0	10 0	9 4½	9 6	9 6	9 3	9 6	10 0	9 6	9 6
Tapioca Root Flour ..	7 6	8 0	8 0	—	—	—	8 6	9 0	—	—
Oats (whole) ..	9 6	8 6	9 0	9 6	7 0	8 9	9 6	9 4	8 9	8 0
Crushed Oats ..	10 0	9 6	9 6	10 6	7 6	9 6	10 0	10 0	9 6	9 0

NON-CONCENTRATES :—The average prices at representative markets at the beginning of July, 1938, were as follows :—
 Potatoes (Main Crop), 4/11½d. per cwt.; Upland Hay, 65/11d. per ton; Meadow Hay 50/- per ton;
 Oat Straw, 41/9d. per ton.

AVERAGE PRICES OF FEEDING STUFFS.

The following table shows the average retail cash prices per cwt. of feeding stuffs at 1st July, 1938, with comparative prices as at the first of the previous month; the costs per unit of protein equivalent and of starch equivalent are also given in respect of each month.

	Protein Equiv- alent	Starch Equiv- alent	Average price per cwt. at		Cost per unit of protein equivalent		Cost per unit of starch equivalent	
			1st July, 1938	1st June, 1938	July	June	July	June
Protein Foods			s. d.	s. d.	s. d.	s. d.	s. d.	s. d.
Linseed	19.0	119.0	17 8	17 7	18 7	18 6	3 0	2 11
Crushed linseed	19.0	119.0	18 6	18 8	19 6	19 8	3 1	3 2
Linseed cake								
(home-made)	25.0	72.0	12 3	12 2	9 10	9 9	3 5	3 5
Linseed cake	25.0	72.0	11 2	11 2	8 11	8 11	3 1	3 1
(foreign)								
Linseed cake meal	25.0	72.0	11 6	11 6	9 2	9 2	3 2	3 2
Decorticated								
Cotton cake	35.0	71.0	9 11	10 2	5 8	5 10	2 10	2 10
Decorticated								
Earthnut cake	41.0	73.0	9 1	9 4	4 5	4 7	2 6	2 7
Extracted soya								
bean meal	38.0	64.0	10 10	10 7	5 9	5 7	3 5	3 4
Fish meal (60% protein)	53.0	59.0	16 11	16 7	6 4	6 3	5 9	5 8
Meat meal (60% protein)	55.0	61.0	15 2	15 5	5 6	5 7	5 0	5 1
Meat & Bone meal (40% protein)	36.0	44.0	10 7	10 9	5 10	6 0	4 10	4 11
Medium Protein Foods								
Palm kernel cake	17.0	75.0	9 4	8 11	11 0	10 6	2 6	2 5
Palm kernel meal	17.0	75.0	9 4	9 1	11 0	10 8	2 6	2 5
Starchy Foods								
Maize	6.8	81.0	7 4	7 6	21 7	22 1	1 10	1 10
Maize meal	6.8	81.0	7 9	7 10	22 9	23 0	1 11	1 11
Flaked maize	8.6	83.0	8 5	8 5	19 7	19 7	2 0	2 0
Wheat	9.6	72.0	10 0	9 11	20 10	20 8	2 9	2 9
Red bran	10.0	43.0	8 10	8 10	17 8	17 8	4 1	4 1
White bran	10.0	43.0	10 0	10 2	20 0	20 4	4 8	4 9
Brown pollard	11.0	60.0	8 10	9 0	16 1	16 5	2 11	3 0
White pollard	11.0	60.0	9 9	10 0	17 9	18 2	3 3	3 4
Barley meal	7.0	70.0	9 6	9 8	27 2	27 8	2 9	2 9
Oats	7.6	60.0	8 9	8 7	23 0	22 7	2 11	2 10
Crushed oats	7.6	60.0	9 6	9 3	25 0	24 4	3 2	3 1
Tapioca root flour	1.0	83.5	8 2	8 2	163 4	163 4	1 11	1 11
Non-Concentrates								
Potatoes	0.6	18.0	4 11½	3 9½	166 0	126 5	5 6¼	4 2½
Upland hay	4.9	24.0	3 3½	3 2	13 5¼	12 11	2 9	2 7½
Meadow hay	4.6	31.0	2 6	2 5½	10 10½	10 7	1 7¼	1 7
Oat straw	0.9	20.0	2 1	2 1½	46 3	47 8	2 1	2 2

The object of the foregoing tables, besides providing information regarding the prices of feeding stuffs and the trend of prices, is to give purchasers a

guide as to the economic purchase of supplies. It should be understood that the price per ton is not a sound basis on which to judge whether or not a particular food or grade of a particular food is good value for money. The composition of the foods is the only basis on which different grades can be compared. The value of foods of different kinds, but of the same nature in reference to market prices, can also be compared on this basis.

In the case of an artificial manure which supplies only one fertilising ingredient as, for example, sulphate of ammonia, which supplies nitrogen, the cost of the unit of nitrogen at the price charged can be determined quite readily by dividing the price per ton by the percentage of nitrogen in the sample, and the figure thus obtained is the cost of a unit of nitrogen. By this method the most economical source of nitrogen can be ascertained. Similarly, in the cases of phosphatic and potassic manures.

With feeding stuffs, however, the same method cannot be applied to determine comparative values. This is because every feeding stuff contains three important food constituents in varying proportions. These are (1) carbohydrates, (2) oils or fats, and (3) proteins or albuminoids. The carbohydrates comprise a group of substances such as starch, sugar and cellulose. These substances supply heat or energy to the animal, and the surplus goes to form fat. They are the fuel which the animal requires to keep the body "fires" burning. The oils of a feeding stuff are also heat and energy suppliers, and the surplus is stored as fat. The oils are approximately $2\frac{1}{2}$ times more valuable than the carbohydrates as heat and energy producers, but excess in a ration may lower its digestibility and cause digestive troubles. The proteins are the most valuable and most expensive food constituent. They contain nitrogen and are the part of the food from which products which contain protein are chiefly made. Thus the protein products, such as lean meat, milk and eggs, are formed principally from protein, and young, growing animals, dairy cows and laying hens must have an adequate quantity of protein for full growth, development and production.

While all animals require a certain amount of carbohydrates, oils and proteins, the relative amounts depend on the class of stock. For example, a two-year-old fattening bullock requires much less protein than a dairy cow in milk and a fattening chicken less than a laying pullet.

There are wide differences in the composition of the different kinds of feeding stuffs. Some are rich in carbohydrates and, therefore, particularly valuable for fattening purposes. These include oats, maize, barley and wheat, and their products. Others are rich in protein and are valuable for producing flesh, milk and eggs. These include decorticated cotton cake, decorticated earlnut cake, meat meal and soya bean meal.

In the following table the composition of some of the commonly used feeding stuffs is shown—

	Water.	Protein.	Oil.	Carbohydrates.
Non concentrates				
Swede turnips ...	88	1	0.2	9
Potatoes ...	75	2	0.1	21
Cabbage ...	89	1.5	0.5	8
Oat Straw ...	14	4	2	37
Meadow hay ...	10	10	3	45
Pasture grass ...	80	3.5	0.8	10
Fattening Foods				
Crushed oats ...	13	9	6	60
Maize meal ...	12	10	4	70
Barley meal ...	13	12	2	66
Pollard ...	13	15	5	57
Flesh forming foods				
Decorticated Cotton cake ...	9	40	9	26
Decorticated Earthnut cake ...	10	46	7	23
Meat meal ...	11	60	6	—
Soya bean meal ...	11	44	1.5	32

The problem confronting the purchaser of feeding stuffs, who is concerned with the business of getting best value for money, is one which is much more difficult to solve than is the case with artificial fertilisers. There are at least four aspects of the problem to be considered :

- (1) The quality of the different foods offered for sale. This can be determined by reference to the particulars of composition which a seller must give a purchaser in accordance with the Fertilisers and Feeding Stuffs Act.
- (2) The physical condition of the foods, and if fresh or stale.
- (3) The suitability of the foods for the purpose in view.
- (4) The comparative values of the foods at the prices quoted.

The chief concern of this section of the Report is comparative values and, therefore, that aspect of the problem will be considered specifically.

The proteins play a part in the nutrition of the animal which cannot be taken by either carbohydrates or oils. In addition to this, the proteins, carbohydrates and oils have very different values for the production of energy or fat. It therefore follows that the simple procedure of totalling the percentages of these three ingredients and dividing this total into the price per ton in order to obtain a value for a unit of the food-stuff is quite unsound. Various methods have been used to compare the values of different feeding stuffs, but none is completely satisfactory. For practical purposes the least cumbersome is the

method whereby the food-stuffs are placed in groups of similar composition, and the values of the members of each group are then compared by consideration of (a) their protein equivalents, and (b) their starch equivalents. The starch equivalent is the number of pounds of starch which would be required to produce the same amount of "fat" in an animal as 100 pounds of the food-stuff in question. It is essentially a measure of the fat-producing value of the food-stuff. The protein equivalent is the number of pounds of digestible true protein, plus half the number of pounds of non-protein nitrogenous substances such as amides, present in 100 pounds of the foodstuff. It is a measure of the value of the food-stuff to the animal as a source of protein.

By this method all foods can be reduced to comparable standards based on (1) the protein equivalent, and (2) the starch equivalent.

The next stage in comparing values is to determine the cost of a unit of protein equivalent and of starch equivalent in the different foods which are being compared, and to enable the reader to do this the protein and starch equivalent figures for the different foods are given on the table on page 178, and also the cost per unit of protein equivalent and of starch equivalent in each case. These costs have been determined by dividing the protein equivalent figure and the starch equivalent figure, respectively, into the current price per ton, and the lower the quotient figures thus obtained the cheaper is the particular food as a source of protein or of starch equivalent as the case may be.

However, it would be quite misleading to compare the cost of a unit of protein equivalent in a protein food (which is purchased principally for its protein) with the cost of a similar unit in a starchy food. In other words, foods such as maize meal and pollard cannot be compared on the basis of cost of protein equivalent with foods such as decorticated cotton cake and meat meal.

The best course to adopt is to consider for what purpose the particular food is required, decide what foods are suitable for that purpose, examine the samples of these different foods which are offered and, if all appear to be satisfactory, apply the unit value system of determining which one provides protein equivalent or starch equivalent at the cheapest rate. A few examples may be helpful in explaining the procedure.

- (1) Suppose it is intended to purchase a protein food for the purpose of balancing a ration for dairy cows. The protein foods suitable for dairy cows are decorticated cotton cake, decorticated earthnut cake and soya bean meal. From the table on page 178 it is seen that at the current average prices of these foods the cost of the unit of protein equivalent in each is as follows:—

Decorticated cotton cake	...	...	5/8d.
Decorticated earthnut cake	...	...	4/5d.
Soya bean meal	...	...	5/9d.

Accordingly decorticated earthnut cake is the cheapest source of protein.

- (2) A protein food is required as a milk substitute to balance the ration for fattening pigs. The foods suitable for this purpose are soya bean meal, meat meal and meat and bone meal. Referring again to the table, it is seen that at the current average prices of these foods the cost of the unit of protein equivalent in each is as follows:—

Soya bean meal	...	...	5/9d.
Meat meal (60% protein)	...	...	5/6d.
Meat and bone meal (40% protein)	...	...	5/10d.

Therefore meat meal (60% protein) and Soya bean meal are cheaper sources of protein than meat and bone meal (40% protein) amongst the purchased foods suitable for pigs. This example shows also how the price per ton may mislead a purchaser into thinking he is being economical when he buys at the cheapest price. The 60% meat meal costs 4/7d. per cwt. more than the 40% meat and bone meal, and yet it is a cheaper source of protein than the latter. Besides, a lesser proportion in the meal mixture will suffice, and having usually a lower content of oil than the 40% grade, it is likely to prove more satisfactory than that grade both from the thriving point of view and its effect on the quality of the bacon.

- (3) Whether is it more economical to feed white pollard than brown pollard or white bran than red bran, even though the prices per ton of the white grades are higher than those of the brown or red grades? The figures in the table show that the cost of both the unit of protein equivalent and of starch equivalent is less for the brown pollard than the white, and less for the red than the white bran. It follows, therefore, that at current prices the coloured grades of pollard and bran are cheaper than the white grades. It should be remembered in this connection, however, that the comparison of costs in these cases has been made on the assumption that the composition of the coloured grades is the same as that of the white grades. A pollard containing say, 8 per cent. fibre, even if of a white colour, would have a far lower feeding value than one containing only 4 per cent. of fibre. Colour is not a guide as to the feeding value of pollard or bran.

TRADE AND PRICES OF LIVE STOCK AT BELFAST AUCTION MARTS.

Supplies of fat cattle at the sale-yards during June were on the small side. The demand eased in the first week of the month and weakened further during each subsequent week. Shippers were very cautious in making purchases and were unwilling to pay the high prices of recent months. Values fell gradually during the month, the total drop from the average figure for May amounting to 1/9d. per live cwt. Generally speaking, home-bred medium weight cattle were in most demand, and heavyweight cattle difficult to cash, whilst rough and unfinished imported cattle were almost neglected. The following were the price ranges on the last Tuesday in June:—top quality medium weight cattle of moderate finish, 39/- to 40/6d. per live cwt., good commercial cattle, 37/6d. to 39/- per live cwt., heavy weight and rough animals 35/- to 37/6d. per live cwt. The following table shows the average prices of fat cattle during each week in June compared with corresponding dates in 1937.

PRICES OF FAT STOCK.

<i>Week ended</i>	<i>per cwt.</i>	<i>Week ended</i>	<i>per cwt.</i>
11th June, 1938 ..	41/-	12th June, 1937 ..	43/6
18th " " ..	40/3	19th " " ..	42/3
25th " " ..	39/3	26th " " ..	42/3
2nd July, " ..	38/3	3rd July, " ..	42/6
Average for month	39/6	Average for month ..	43/-

Trade in store cattle moved on the same lines as beef cattle, easing from the second week of the month onwards. Supplies were large all month, and included many consignments from Eire. Good home-bred stores in condition maintained a fairly good demand, but prices were about 10/- to £1 per head easier than in May. At the last sale of the month, the downward trend of prices was more marked.

In the dairy cattle end also demand ruled on slower lines, and prices were down about £1 per head on the month.

Sheep and lambs maintained a firm trade in the first two weeks of June. In the third week the easier tone of the English markets reacted on trade here and prices weakened, although in the last week there was some recovery and prices reverted to higher levels.

PRICES OF OTHER STOCK AT THE BELFAST AUCTION MARTS.

Description	Week ended 4-6-38	Week ended 11-6-38	Week ended 18-6-38	Week ended 25-6-38	Week ended 2-7-38
Fat Cows					
..	Range of 1st quality " 2nd "	£14 to £19 £10 to £16-10	£14 to £19 £10 to £15	£13 to £20-8-6 £7 to £13	£12 to £18 £9 to £13
Store Cattle :					
Forward Stores ..	Range of 1st quality " 2nd "	£15-10 to £17-7-6 £13-5 to £15-5	£12-10 to £18-2-6 £9-5 to £15-5	£15 to £16-12-6 £13 to £14-15	£13-10 to £15-5 £12 to £13-5
Calves (under 12 months)	1st .. 2nd "	£10 to £12-10 £8 to £9-15	£10-15 to £12-15 £4-5 to £9-5	£9-15 to £12-10 £6-5 to £9	£9-10 to £11-10 £6-5 to £9
Dairy Cattle :					
Milch Cows ..	Range of 1st quality " 2nd "	£22 to £26-5 £17 to £21	£22 to £28 £17 to £21	£22 to £26-15 £17 to £21	£21 to £26-5 £16 to £19
Springers ..	1st .. 2nd "	£20 to £23 £16 to £19	£18 to £20-10 £15 to £17	£21 to £25-10 £17 to £20	£20 to £24 £16 to £19
Sheep and Lambs :					
Crossbred & White Ewes	Range of 1st quality " 2nd "	38/- to 53/6 30/- to 44/-	38/- to 53/- 28/- to 44/-	30/- to 45/- 22/6 to 35/-	30/- to 45/- 20/- to 37/6
Blackface Ewes ..	1st .. 2nd "	28/- to 42/- 18/6 to 29/-	28/- to 36/6 20/- to 29/-	25/- to 33/6 17/6 to 27/-	25/- to 34/6 20/- to 27/-
Crossbred & White Lambs	1st .. 2nd "	38/- to 47/- 33/- to 37/6	38/- to 44/- 32/- to 37/6	32/- to 42/6 27/- to 33/-	30/- to 37/6 24/- to 30/-
Rams ..	1st .. 2nd "	35/- to 55/- 30/- to 44/-	35/- to 50/- 36/- to 42/-	45/- to 52/6 35/- to 44/-	32/6 to 50/- 34/- to 38/-
Spring Lambs ..	1st .. 2nd "	38/- to 49/- 25/- to 36/-	38/- to 50/- 25/- to 36/-	33/- to 50/- 24/- to 32/-	34/- to 40/- 28/- to 32/-

PRICES OF LIVE STOCK.

Average prices of Live Stock at Fairs during the month of June, 1938.

Date	Fair	Calves (under 9 months)	Store Cattle	Fat Cattle (18 months and over)	Springers		Milch Cows	Fat Lambs (under 12 months old)	Fat Sheep (over 2 years old)	Young Pigs
					Cows	Heifers				
		Per head £ s.	Per cwt. Live weight 40/- to 44/-	Per cwt. Live wtgt. 40/-	Per head £ s.	Per head £ s.	Per head £ s.	Per head £ s.	Per head £ s.	Per head £ s.
1	Rathfriland ..	6 10	38/9 to 42/-	—	17 0	16 0	14 15	—	—	1 12/6
2	Ballymoney ..	7 0	40/- to 43/-	39/-	—	—	—	—	—	—
2	Strabane ..	—	40/- to 49/-	40/-	15 7/6	13 17/6	15 10	—	—	—
3	Moy ..	8 0	42/6 to 43/6	—	17 10	17 0	16 0	—	—	—
7	Omagh ..	—	40/- to 42/-	—	17 15	16 0	—	—	—	—
8	Crossgar ..	7 14	41/- to 45/-	—	16 0	18 0	16 0	—	—	—
8	Irvinestown ..	6 0	40/- to 44/6	41/-	20 10	18 10	—	—	—	—
8	Kilrea ..	—	39/6 to 42/6	39/-	16 0	—	15 0	—	—	—
10	Ballygawley ..	5 18/6	34/- to 38/-	39/-	13 0	14 0	12 10	—	—	—
10	Enniskillen ..	—	37/- to 42/-	38/6	—	16 0	—	—	—	—
13	Limavady ..	—	37/- to 41/-	40/-	—	15 0	—	—	—	—
14	Dungiven ..	6 0	33/- to 40/-	42/-	16 0	15 10	15 0	—	—	—
15	Lisnaskea ..	—	39/- to 41/-	—	17 10	16 15	16 0	—	—	—
16	Ballynahinch ..	—	36/6 to 42/-	—	—	15 0	—	—	—	—
17	Londonderry ..	5 16/9	37/- to 40/-	39/-	20 0	17 0	17 10	—	—	—
18	Portadown ..	6 0	37/- to 45/6	39/-	17 10	16 10	13 10	—	—	—
20	Camlough ..	7 7	39/- to 41/6	38/-	17 0	15 10	16 0	—	—	—
21	Money more ..	7 0	42/- to 43/6	40/-	16 0	15 10	15 10	—	—	—
22	Fintona ..	6 0	37/- to 38/-	39/-	15 0	14 10	—	—	—	—
24	Castlederg ..	—	39/- to 42/6	38/-	15 10	—	14 10	—	—	—
24	Killylea ..	6 7/9	29/- to 42/6	—	22 10	21 0	20 0	—	—	—
25	Ballymena ..	—	41/-	37/6	21 10	18 10	—	—	—	—
30	Antrim ..	—	—	—	—	—	—	—	—	—

* Long wool.

† Downs and Crossbred.

‡ Mountain.

SHIPMENTS OF LIVE STOCK.

Statement showing the Shipments of Live Stock from Northern Ireland ports during the following periods :—
Months of June, 1938, May, 1938, June, 1937; Six Months ended 30th June, 1938, and 30th June, 1937.

PORTS OF :—	CATTLE						SHEEP.			PIGS.			Horses
	Fat	Stores	Milch Cows	Springers	Calves	Total	Fat	Stores	Lambs	Total	Fat	Stores	Total
Belfast	3,746	5,394	1,511	263	—	10,914	55	—	6,624	6,679	4,533	—	4,533
Larne	16	955	1	—	10	982	—	—	1,558	1,558	1,113	96	1,209
Londonderry ..	390	7,093	31	71	658	8,243	187	—	3,292	3,479	285	—	285
Newry	73	—	31	—	—	104	7	—	279	286	—	—	—
Total, June, 1938 ..	4,225	13,442	1,574	334	668	20,243	249	—	11,753	12,002	5,931	96	6,027
Total, May, 1938 ..	4,074	6,459	1,520	161	299	12,513	441	—	4,187	4,628	5,571	8	5,579
Total, June, 1937 ..	2,845	20,675	1,596	488	653	26,257	283	—	16,893	17,176	15,291	240	15,531
Total, Six Months ended 30th June, 1938 ..	29,597	79,689	6,905	794	2,475	119,460	14,402	—	16,167	30,569	45,183	832	46,015
Total, Six Months ended 30th June, 1937 ..	34,957	112,315	7,015	1,071	3,382	158,740	17,798	—	24,785	42,583	75,416	1,646	77,062

IMPORTS AND EXPORTS

Table showing the Imports and Exports through Northern Ireland ports of certain Agricultural Products during the months ended 31st May, 1938, and the five months ended 31st May, 1938, with comparative figures for the corresponding periods in 1937. This information also includes trade with Eire across the land boundary.

(These figures are supplied through the courtesy of the Ministry of Commerce and are subject to revision).

COMMODITY	IMPORTS			EXPORTS		
	Month ended 31st May		Five months ended 31st May	Month ended 31st May		Five months ended 31st May
	1938	1937	1938	1938	1937	1938
Bacon cwt.	4,442	3,264	17,629	35,958	29,496	159,611
Hams cwt.	1,876	1,403	6,795	14,701	9,749	50,803
Pork cwt.	15	279	661	2,990	3,047	15,376
Butter cwt.	25,104	23,145	88,081	159	184	864
Eggs gt. hds.	117,061	154,606	534,401	566,945	476,583	1,380,379
Oat Products (inc. Oatmeal) cwt.	1,169	1,830	8,271	3,759	6,333	26,369
Potatoes tons	980	1,151	1,926	*20,484	*20,246	*116,862
Poultry cwt.	120	197	1,102	10,329	10,124	94,571
Grass Seeds cwt.	2,888	1,097	12,973	36,844	29,949	217,381

* These figures represent the quantities of potatoes inspected by the Ministry of Agriculture for shipment.

There were no imports of oats direct from abroad during May, or in the corresponding month last year.

Table showing the numbers of Live Stock (1) exposed for sale, and (2) sold at 20 fairs in Northern Ireland, during the months of June, 1937, and May and June, 1938 :—

Description of Live Stock	June, 1937		May, 1938		June, 1938	
	Number exposed for sale	Number sold	Number exposed for sale	Number sold	Number exposed for sale	Number sold
Store Cattle ..	7,207	6,043	5,454	2,989	8,650	4,437
Fat Cattle ..	1,056	949	1,086	974	1,025	869
Dairy Cattle ..	1,327	1,120	1,166	833	1,378	956
Sheep ..	491	419	705	444	657	300
Lambs ..	1,604	1,500	244	168	812	600
Young Pigs ..	3,960	2,900	3,530	2,686	3,986	3,091

ACCOUNT OF TRADE AT FAIRS.

At a few centres last month there were large supplies of store cattle, but generally the offerings at fairs throughout the country were only of small to medium size. Trade was sluggish, and sales were hard to effect. Shippers operated very cautiously, and most of the business was done locally by graziers. Prices at almost all centres were from 10/- to £1 per head cheaper on the month. A large proportion of the cattle at all fairs were left unsold as sellers continue to refuse the lower prices offered. Well forward strong stores were in best demand by graziers, and smaller animals were also fairly easy to clear to the same purchasers. As a rule the condition and quality of store cattle was fairly good.

Fat cattle were also in small to medium supply at local fairs, and although at several centres the demand remained firm at late rates, the general tendency was for trade to ease and prices to decline. Medium weight animals of from 8 to 9 cwts. remained in favour, and prices for well-finished lots were fully maintained. The best selling type was the Polled Angus and Shorthorn crossbred.

Supplies of dairy cattle last month were well up to average. Trade ruled quiet, and only the best obtained late rates, the majority of the stock on offer being sold at prices that tended easier. The best sorts of heifers showing signs of milk were easy to clear, but thin, rough and badly-uddered sorts were hard to dispose of.

Sheep and lambs were rather scarce at fairs. Trade in this end also was quiet, and the volume of business done was rather under average. Well-finished fat crossbred lambs of this year's crop were in chief request at around late rates, and young breeding ewes were also fairly easy to dispose of. Prices on the whole were lower than in May.

Rather large numbers of young pigs were shown at the June fairs, and although the demand was fairly good generally, prices showed a tendency to ease further. Store pigs were also a fair trade for less money. The offerings of brood sows were of moderate quality and sold fairly readily. Prices were firm for the Large York type, which were in most request at around £10 each. The general price range for the month was from £7 to £12 according to quality and condition.

11th July, 1938.

This report is issued free on application to the Secretary,
Ministry of Agriculture, Stormont, Belfast.

MINISTRY OF AGRICULTURE. List of Leaflets and other Publications.

LEAFLETS.

- | | |
|--|--|
| <p>No. 1. Flax Seed
 " 2. Improvement of Farm Poultry.
 " 3. Feeding for Egg Production.
 " 4. Marketing of Eggs.
 " 5. The Dishorning of Calves.
 " 6. The Packing of Apples in Standard Boxes.
 " 7. Potato Trials.
 " 8. Seed Testing for Farmers.
 " 9. The Renovation of Orchards.
 " 10. Fruit Tree Pests—Capcid Bugs.
 " 11. Fruit Tree Pests—Aphides and Apple Sucker.
 " 12. Fruit Tree Pests—Caterpillars.
 " 13. Contagious Abortion in Cattle.
 " 14. Cheese-making on the Farm.
 " 15. Suitable Varieties of Fruit.
 " 16. The Feeding of Dairy Cows.
 " 17. Home Bottling of Fruits and Vegetables.
 " 18. Marketing of Dead Poultry.
 " 19. How to Feed Linseed.
 " 20. The Hatching and Rearing of Chickens.
 " 21. The Uses and Advantages of Portable Poultry Houses.
 " 22. Leather-jacket Grubs.
 " 23. The Handling and Care of Wool.
 " 24. Fluke in Sheep.
 " 25. The Rearing and Management of Young Horses.
 " 26. Ordnance Survey Maps for Farmers.
 " 27. How to Keep Eggs Clean.
 " 28. The Construction of a Laying House for Poultry.
 " 29. The Selection and Breeding of Laying Hens.
 " 31. Coccidiosis in Poultry.
 " 32. Roup of Poultry (Fowl Pox).
 " 33. Spraying Calendar for Apple Orchards.
 " 34. The Pruning of Apple Trees.
 " 35. The Fattening of Pigs.
 " 36. Advantages of Milk Recording.
 " 37. The Raising and Fattening of Turkeys.
 " 38. The Destruction of Charlock.
 " 39. The Production of Clean Milk.
 " 40. The Laying Down and Management of Temporary Pastures.
 " 41. Blackleg, Blackquarter or Quarterill.
 " 42. The Purchase of Balanced Rations for Dairy Cows.
 " 43. Tuberculosis in Poultry.</p> | <p>No. 44. Results of Crop Experiments.
 " 45. The Breeding and Rearing of Pigs.
 " 46. Hints for Winter Egg Production.
 " 47. The Care and Management of Sheep.
 " 49. American Gooseberry Mildew.
 " 50. Potato Blight.
 " 51. Butter-making on the Farm.
 " 52. Gapes in Chickens.
 " 54. The Breeding and Rearing of Calves.
 " 55. Destruction of Ragwort or Bendweed.
 " 56. Identification of Egg Supplies.
 " 57. How to have Eggs of First Quality.
 " 58. How the Fertilisers and Feeding Stuffs Act benefits the Farmer.
 " 59. Bacillary White Diarrhoea (Pullorum Disease).
 " 60. Advantages of Winter Agricultural Classes.
 " 61. The Care and Management of Breeding Bulls.
 " 62. The Production of Timber on the Farm.
 " 63. Sheep—Castration, Docking, Foot-Rot and Care of Feet.
 " 64. The Destruction of Warble Fly Maggots in Cattle.
 " 65. The Packing of Apples in Barrels.
 " 66. Seed Testing Facilities for Traders.
 " 67. The Cultivation of Vegetables.
 " 68. The Cultivation of Strawberries.
 " 69. The Construction of Piggeries.
 " 70. Ringworm.
 " 71. The Cultivation of Raspberries.
 " 72. Tree Planting for Shelter and Ornament.
 " 73. The Propagation and Maintenance of Healthy Stocks of Potatoes.
 " 74. New Pure Strains of Flax.
 " 75. Pig Production and the Pigs Marketing Scheme.
 " 76. Acarine (Isle of Wight) Disease of Bees.
 " 77. Licensing of Milk Producers and Distributors.
 " 78. Graded Milk.
 " 79. The Picking and Storing of Apples.
 " 80. Hoose or Husk in Farm Stock.
 " 81. The Construction of Cow Houses.
 " 82. White Scour in Calves.
 " 83. The Care, Management and Feeding of the Poultry Breeding Stock.
 " 84. Lime and Liming.</p> |
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Any of the above leaflets may be obtained free of charge and post free on application to the Secretary, Ministry of Agriculture, Stormont, Belfast.

CIRCULARS.

- No. 1. Phosphatic Fertilisers.
 " 5. Why Pay a Tax on the Horns of Cattle?
 " 8. Basic Slag.
 " 9. Smut in Oats.
 " 10. Purchase of Fertilisers and Feeding Stuffs.
 " 11. Fertilisers and Feeding Stuffs Act—General Summary.
 " 12. The Treatment of Liver Fluke.
 " 13. The ox-Warble Fly.
 " 306. Fertilisers and Feeding Stuffs Act, 1926—Revision of Regulations.

MISCELLANEOUS PUBLICATIONS.

Store Cattle.
 Reports on Egg-Laying Tests.
 Crop Insurance.
 List of Growers of Certified Crops of Immune Varieties of Potatoes.
 List of Growers of Certified Crops of Non-Immune Varieties of Potatoes.
 The Ministry's Monthly Report.
 Register of Premium Stallions.
 Guide to the Live Stock Breeding Act (Northern Ireland), 1922.
 Guide to the Marketing of Fruit Act (Northern Ireland), 1932.

Any of the above publications may be obtained free of charge and post free on application to the Secretary, Ministry of Agriculture, Stormont, Belfast.

The following publications can be obtained from His Majesty's Stationery Office, 80 Chichester Street, Belfast, at the prices stated:—

- (1) The Annual Report of the Ministry of Agriculture for Northern Ireland. Price 2/6 net.
- (2) Annual Report upon the Agricultural Statistics of Northern Ireland. Price 2/- net.
- (3) The Journal of the Ministry of Agriculture for Northern Ireland. Price 2/6 net.
- (4) The Agricultural Output of Northern Ireland, 1925. Price 2/6 net.

